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AUTHOR Hughes, Orval D.
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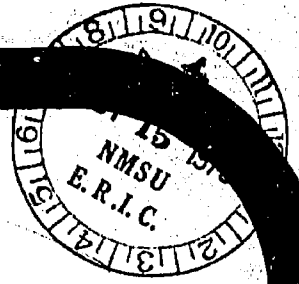
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ABSTRACT

Project HEED (Heed Ethnic Educational Depolarization) involves over 1,000 Indian children in grades 1-8 in Arizona. The project target sites are 48 classrooms at Sells, Topowa, San Carlos, Many Farms, Hotevilla, Peach Springs, and Sacaton. Objectives are to increase: (1) reading achievement, (2) affective behavior of teachers, (3) motivation by means of an open curriculum, (4) effective Special Education programs, and (5) involvement of parents in the school/community relations. Project HEED is evaluated for 1971-72 by a variety of tests on a pretest and posttest basis. Among these are the Distar Mastery Test; Field Enterprise, Special Needs Reading Series; Wide Range Achievement Testing; Self-Appraisal Inventory; and the SRA Reading Comprehension and Vocabulary Tests. Some of the findings are: (1) a noted progress in reading achievement in nearly all classrooms; (2) an increase in self-image of the students; (3) an 80% improvement in affective behavioral patterns of the teachers; and (4) a 70% increase in parent involvement. Majority of the data is in tabular form by grade and school. (NQ)

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FINAL EVALUATION REPORT

PROJECT HEED

TITLE III

SECTION 306

HEED

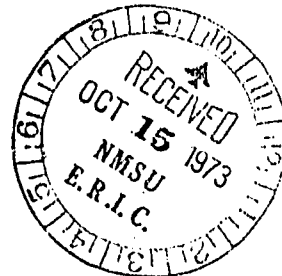
Heed Ethnic Education Depolarization



SouthWestern
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FINAL EVALUATION REPORT

Project HEED

Title III, Section 306

by

Orval Hughes

Southwestern Cooperative Educational Laboratory, Inc.

1404 San Mateo SE

Albuquerque, New Mexico 87108

September, 1972

I. INTRODUCTION

The first year of the Title III Project, (Project HEED - Heed Ethnic Educational Depolarization), may be considered both a success and a failure.

Project management may take credit for the following accomplishments:

- (1) A very difficult Project was initiated at the target sites.
- (2) Educational materials were obtained and, in most cases, installed in the classrooms.
- (3) An advisory committee representing the various tribal groups was established with the express purpose of assisting Project management.
- (4) Attention was given to problems of Special Education, as is required by Section 306, Title III. Special Ed classes were functioning at three target sites, specifically Sacaton, San Carlos Rice, and Sells.
- (5) Progress was noted in reading achievement in nearly all classrooms.
- (6) Some in-service meetings were held to provide professional growth opportunities for participating teachers.
- (7) Several visits were made by Project management to the target sites, thus establishing a communications link from Project management to the classrooms.
- (8) Testing for evaluation purposes was accomplished as scheduled.
- (9) A few constructive field trips were conducted.
- (10) Study Social Rooms were established in the schools and used by the parents and other community representatives.
- (11) Project management has applied necessary corrections in a formative manner to improve the probability of accomplishing Project objectives, suitably revised, during the second year.

On the negative side, the following summary points were noted:

- (1) The scope of objectives was too broad, and in a few cases, objectives were unrealistic.
- (2) Project management was spread too thin in its effort to coordinate a statewide Project.
- (3) Teachers, in particular, felt that the Project objectives had not been clearly explained to them.

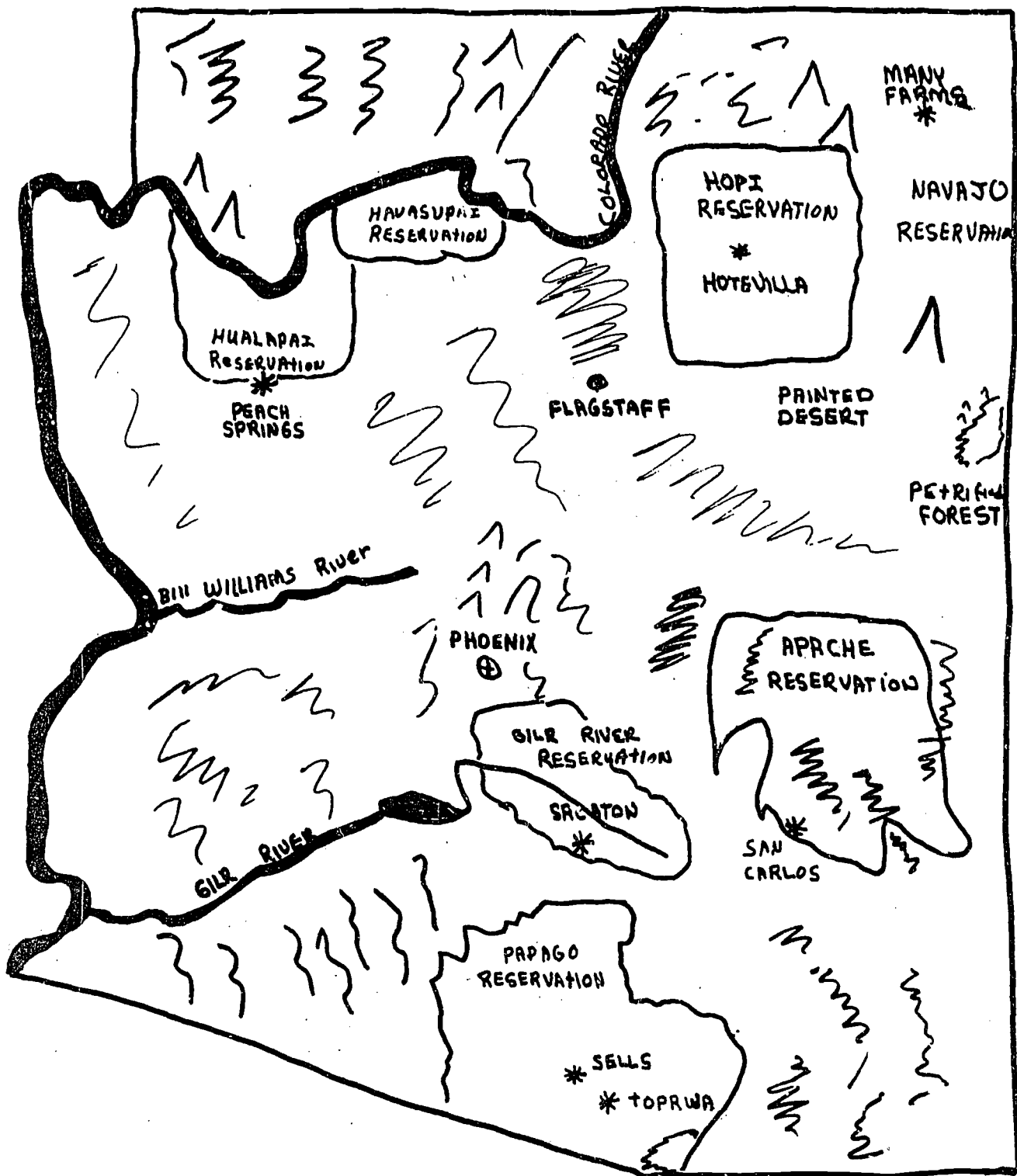
- (4) The objective on reading achievement was unrealistic in that it failed to identify the proper entry behavior of the children, insofar as grade equivalent level was concerned.
- (5) The development of literacy skills involves considerably more than reading, and should at least include an oral language component.
- (6) The objective on teacher affective behavior was never clearly articulated to the teachers by Project management, and considerable resentment was generated as a consequence. The testing instrument lacked quantification and validity.
- (7) The evaluation component to assess accomplishment of the teacher affective behavior was not carried out according to the evaluation design. The instrument selected for measurement in this area lacked quantification, and did not appear to be valid for the task.
- (8) Motivational Kits were purchased but these were not placed into general classroom use. These Kits were appropriate for teachers, but not for students.
- (9) Data on the self-appraisal inventories were not obtained anonymously, as is specified by the publisher of the testing instrument.
- (10) Reading passages on process evaluations were found to be highly inappropriate to both grade level and interest level of Indian children.
- (11) Attendance at in-service meetings was poor, even though generous stipends had been assured. Poor attendance, in turn, reflects disinterest in the Project.
- (12) Frequent changes in teacher assignment were noted in the special education classroom at one site, (Sells).
- (13) Montessorri materials were purchased for special education children though not used in some instances.
- (14) The abrupt resignation of the Project Director at about the mid-year point created a leadership problem for the balance of the year. The Project Coordinator had to assume additional duties as Acting Project Director and the combination of both jobs was too much for any one person to handle. In retrospect, the Superintendent should have recruited a full time Project Director immediately following the resignation.
- (15) Test administration, as reported by some Principals at the sites, left much to be desired. (This comment stems from pre-testing. Mature educators from the Albuquerque Public Schools were employed to assist SWCEL in post-testing).

- (16) The Advisory Committee did not have a set of by-laws, and while the intent of the committee is clear, its effectiveness was limited. Some sites were not represented on this committee.
- (17) One field trip appeared unproductive and wasteful of project monies.
- (18) Project management had poor liaison within the Sacaton site, even though this was Project Headquarters.
- (19) The assigned community representative to Project Management was not employed to fullest advantage.
- (20) Special Education classes were available at three sites, but in view of the requirements of Title III, Section 306, that at least 15% of the Project effort be devoted to Special Education, it would appear that more could have been done for handicapped children at Peach Springs, Hotevilla, and Many Farms.
- (21) The role of the Project Director in terms of relationships with principals at the target site schools, the role of these principals in terms of relationship to the Project, and the role of the Superintendent at Sacaton to the Project Director and to the Advisory Committee, all need clarification. Some problems arose during the first year of the Project because the lines of authority were not clear.
- (22) The normal functions of educational program auditing were not performed in a consistent, thorough manner, due to the fact that there was no independent educational program auditor assigned to the Project. The auditor contracted to do this important task was a Certified Public Accountant, and not an Educational Program Auditor.

II. SCOPE OF PROJECT & ORGANIZATION

Project HEED, the acronym for Heed Ethnic Educational Depolarization, involved over 1000 Indian children in 48 separate classrooms at the following target sites in Arizona: Sells, Topowa, San Carlos, Many Farms, Hotevilla, Peach Springs, and Sacaton.

The expansiveness of the Project can be illustrated by reference to the map of Arizona, which depicts the numbers of children in the Project and their tribal affiliation.



Project HEED, for its initial year, had five general objectives. These objectives were:

- (1) To increase reading achievement
- (2) To increase affective behavior of teachers
- (3) To increase motivation by means of an open curriculum
- (4) To increase effective Special Education programs
- (5) To increase involvement of parents in the school/community relations

The selection of these objectives reflects very thorough planning on the part of Project management at the outset. The rationale for these objectives, applicable to any of the target sites, might be expressed as follows:

(1) Reading:

Indian children are disadvantaged in comparison with Anglos or Mexican-Americans of the same age for they have not had the same opportunities to develop pre-reading skills. Upon entering school, the Indian child is already behind his Anglo or Mexican-American contemporary in grade level reading skills. His home environment does not provide the reinforcement for developing these skills to the same degree that children of other cultures enjoy.

Since reading is a fundamental literary skill, improvement in reading ability should assist the Indian child to compete successfully with children of other cultures.

(2) Affective Behavior

American Indian students are usually taught by non-Indian teachers. Curriculum development is usually designed by non-Indian educators. These curricula often create barriers and frustrations which Indian students have difficulty processing. The communication in the classroom between teacher and student includes a non-verbal component which, according to one authority, constitutes at least 70% of the total communication. The teacher's affective behavior, as perceived by the student, sets the emotional environment and is a primary influence for motivating the learner.

An improvement in the teacher's affective behavior, as this relates to cultural awareness and understanding of value orientations, should be accompanied by a corresponding improvement in the learning process.

(3) Motivation

The learner must be motivated to learn, or the learning process will fail to take place. Whatever else the teacher might do, her fundamental task is to develop and maintain a high interest in learning on the part of the student. No matter how qualified in subject matter a teacher might be, if she is unsuccessful in efforts to make the child want to learn, the probable effects are that the child will not learn.

(3) Motivation (cont.)

The high drop-out rate for Indian children indicates that in many cases these children are not motivated by school activity. Attendance patterns also reflect this lack of interest. In the mind of the Indian child, the society outside of the school may well provide more meaningful experiences to him than does the society within the school. A school curriculum which concentrates on improvement in motivation, by whatever means, should theoretically benefit the Indian child.

(4) Special Education

Needs assessment data from research conducted by the Bureau of Indian Affairs substantiate the high proportion of handicapped Indian children in the rural areas of Arizona. The highest single category involves children with hearing handicaps, possibly a result of a widespread incidence of Rubella, (German Measles), during the mid-1960's. The fact that the Indian child grows up in a rural setting, in relative isolation from urban environments, tends to add to the problem, for the opportunity for community health clinics, and normal sources of referral, are often lacking. The services to deal effectively with problems of Special Education have logically been concentrated in areas of population density, and as a consequence, the Indian child again is disadvantaged, when compared to his Anglo, and to a lesser extent, Mexican-American counterpart in the Southwest.

A comprehensive, systematic program designed to improve the educational opportunities for handicapped Indian children requires more than one year to implement, but any effort in this direction, however small, appears justified.

(5) Parental Involvement

The child spends considerably more of his time at home than he does at school. The influence of the parent, unless the circumstances are unusual, supercedes the influence of the teacher, according to specialists in early childhood education. Survival is the most primitive need, and it is the home which satisfies the requirements of food, water, clothing, and shelter.

Interest and participation by the parents in the life of the school can complement the educational goals set by the school authorities, in the sense that the parental involvement reinforces the efforts of the school. This has the effect of providing a carry-over function, and the child tends to accept school life on a basis not in competition with family life.

The organization for implementing these objectives through the various target sites functioned from a Headquarters in Sacaton, Arizona. The full time staff included a Project Director, a Project Coordinator, a Community Representative, and a Secretary. This staff was subordinate to the Superintendent of the Sacaton Public Schools.

The Project Management staff coordinated the activities of the Project on a day-to-day basis. Such activities included the procurement and dissemination of educational materials, the

planning of in-service training institutes, the arrangements for consulting services (as these were necessitated), the visitation to target sites for first-hand observations of the Project at the classroom level, and liaison with various groups concerning Project matters, (i.e. Advisory committee, Federal and state officials). The Project Staff issued a periodic newsletter as a primary means of reporting significant events as these took place from site to site.

Project management, in conjunction with the Southwestern Cooperative Educational Laboratory, carried out the internal evaluation function.

A critical point in the first year developed when the Project Director resigned. The Project Coordinator assumed additional duties as Acting Project Director. Some of the uncertainties on the part of participating teachers as to Project Goals and objectives must be attributed to the fact that Project Management, following the resignation of the Director, had too many responsibilities to handle with a reduced staff. An organization which provided for some degree of decentralization of leadership authority to the target site level on a formal basis might have proven more effective in the implementation process.

III. EVALUATION DESIGN & EVALUATOR'S REPORT

This section of the report will follow the evaluation design.

1. General Objective

To increase the achievement of students in reading.

1.1 Performance Objective

As a result of the application and utilization of reading programs, (Distar K-3, and Field Enterprise, Special Needs Reading Series Grades 4-8), 70% of the K-3 and 60% of the 4-8 students in the target population will be reading at grade level by June 1972 as evidenced by results of standardized reading tests.

1.1.1 A Project Director was employed to project leadership for this phase of the Project. A secretary was also employed.

The Project Director was a former teacher, with especial knowledge in teaching the Distar Reading Program.

The resignation of the Project Director and its effects upon the Project have been previously discussed.

1.1.2 Reading materials were purchased and distributed to the target sites. At TOPOWA, the Distar materials were not implemented in the 1st grade classroom, for the reason that the teacher preferred other reading programs. It must be recognized that there are a variety of reading programs, that there are a variety of approaches for teaching reading, and that children learn to read differently. A reading program which best suits one child does not necessarily work for all children. Distar reading is

highly-structured, and represents a program designed to attack words. This has proven to be effective with disadvantaged children. There are other programs which stress meaning to a greater degree.

There was no full-scale pre-service workshop for the teachers. Teachers, in most cases, started out the 1971-1972 school year unaware of the goals and objectives of the Project. Some of the teachers had attended Distar Reading Institutes.

- 1.1.3 Project management had a late model, air-conditioned vehicle assigned on a full time basis. The vehicle was utilized effectively, having over 20,000 miles during the Project year.

- 1.1.4 Several teachers and aides participated in SRA conducted workshops designed to prepare teachers for using Distar reading materials.

It is believed that the upper level teachers did not have a similar opportunity to learn about Field Enterprise materials. (This comment is based upon conversations with teachers and the Acting Project Director).

- 1.1.5 During site visitations, Distar teachers were observed on a frequent basis by Project management staff. Observation schedules, patterned along the lines of the SWCEL Oral Language Program observation schedule, were used to monitor teacher performance in reinforcement, modeling, teaching cues, etc. Post-observation conferences were held in order to assist teachers in maintaining their Distar teaching skills.

While this task was handled in a highly excellent manner, there did not appear to be the same effort devoted to monitoring reading activities in the upper grade levels.

It is also possible that the reading specialist assigned to the school, (i.e. Mrs. Colcord at Peach Springs), might have been used more extensively to assist Project management in this function.

- 1.1.6 Project management did publish a monthly newsletter which featured a variety of activities, (i.e. Junior Rodeo, field trip, reading programs, social studies rooms, etc.). A review of these newsletters indicates that the sites were not universally cooperative in furnishing articles for publication. St. Charles Mission at San Carlos was the outstanding contributor. The difficulties of publishing such a newsletter, notwithstanding, it would appear that more decentralization of management to the site level could result in increased responsiveness.

- 1.1.7 Regular classroom students in grades 2-8 were administered the SRA Reading Achievement Test on a pre-post basis. The test instruments measured reading comprehension and vocabulary skills. Grade equivalents are based upon national norms, not norms for Southwest Indian children. From analysis of pre-test scores, it is clearly evident that the average child was far below grade level, and that the performance objective cited in Section 1.1 is unrealistic.

1.1.7 (cont.)

The pages which follow report mean grade equivalent scores, by grade level and by site, for both comprehension and vocabulary--and on a pre-post basis. The form and level of the test instrument is indicated.

The reader may detect a slight variance in grade equivalents when comparing the results reported in these pages with those cited in the general statistical treatment. (See Addendum)

Grade equivalents in the following pages were determined by converting the mean raw score for a class to a mean grade equivalent score.

The statistical treatment, on the other hand, has averaged each child's grade equivalent score. Grade equivalents peak out at both the upper and lower ends of the distribution of scores, and this accounts for the slight variations in the data.

Mean Scores as Grade Equivalents
Comparison by Sites
Second Grade

| <u>Site</u> | <u>Group</u> | <u>Comprehension</u> | | | <u>Vocabulary</u> | | |
|----------------------|--------------|----------------------|-------------|-------------|-------------------|-------------|-------------|
| | | <u>Pre</u> | <u>Post</u> | <u>Gain</u> | <u>Pre</u> | <u>Post</u> | <u>Gain</u> |
| Syceton | A | 1.7 | 2.3 | 0.6 | 1.6 | 2.5 | 0.9 |
| | B | 1.9 | 2.3 | 0.4 | 2.2 | 2.5 | 0.3 |
| Ranch Springs | A | 1.4 | 2.0 | 0.6 | 1.8 | 2.3 | 0.5 |
| | B | 1.6 | 2.3 | 0.7 | 1.2 | 2.3 | 1.1 |
| Many Farms | A | 1.6 | 2.2 | 0.6 | 1.8 | 2.4 | 0.6 |
| | B | 1.4 | 2.4 | 1.0 | 1.9 | 2.4 | 0.5 |
| Hateville | A | 1.3 | 1.4 | 0.1 | 1.3 | 1.9 | 0.6 |
| | B | 1.1 | 1.5 | 0.4 | 1.9 | 1.9 | 0.0 |
| San Carlos Mission * | A | 2.3 | 2.8 | 0.5 | 2.3 | 2.9 | 0.6 |
| | B | 2.4 | 2.5 | 0.1 | 2.2 | 2.6 | 0.4 |
| Topowa | A | 1.1 | 1.9 | 0.8 | 1.5 | 1.6 | 0.1 |
| | B | 1.3 | 1.5 | 0.2 | 1.1 | 1.8 | 0.7 |

A group took Form C as pre test and Form D as post test

B group took Form D as pre test and Form C as post test

Test instrument SRA Level 2-4, Reading Comprehension and Vocabulary

- * Second grade children at San Carlos Mission were significantly better in reading comprehension skills at pre test time than any other group, at the 1 % level.

Mean Scores as Grade Equivalents
Comparison by Sites
Third Grade

| <u>Site</u> | <u>Group</u> | <u>Comprehension</u> | | | <u>Vocabulary</u> | | |
|-----------------------|--------------|----------------------|-------------|-------------|-------------------|-------------|-------------|
| | | <u>Pre</u> | <u>Post</u> | <u>Gain</u> | <u>Pre</u> | <u>Post</u> | <u>Gain</u> |
| Sacaton | A | 2.3 | 2.7 | 0.4 | 2.3 | 2.7 | 0.4 |
| | B | 2.2 | 2.3 | 0.1 | 2.4 | 2.1 | -0.3 |
| ----- | | | | | | | |
| Peach Springs | A | 1.6 | 1.9 | 0.3 | 2.0 | 1.8 | -0.2 |
| | B | 1.7 | 1.7 | 0.0 | 2.0 | 1.8 | -0.2 |
| ----- | | | | | | | |
| Many Farms | A | 1.9 | 2.2 | 0.3 | 2.2 | 2.4 | 0.2 |
| | B | 1.8 | 2.3 | 0.5 | 1.9 | 2.4 | 0.5 |
| ----- | | | | | | | |
| Hotevilla | A | 2.2 | 2.5 | 0.3 | 2.6 | 3.1 | 0.5 |
| | B | 1.9 | 2.1 | 0.2 | 2.2 | 2.3 | 0.1 |
| ----- | | | | | | | |
| San Carlos Mission | A | 2.6 | 3.3 | 0.7 | 2.3 | 2.9 | 0.6 |
| | * B | 3.1 | 6+ | 2.9 | 2.9 | 5.0 | 2.1 |
| ----- | | | | | | | |
| San Carlos Rice | A | 2.1 | 2.6 | 0.5 | 2.4 | 2.6 | 0.2 |
| | B | 2.0 | 2.3 | 0.3 | 2.1 | 2.4 | 0.3 |
| ----- | | | | | | | |
| Topowa | A | 1.7 | 2.4 | 0.7 | 1.8 | 2.4 | 0.6 |
| | B | 1.7 | 1.8 | 0.1 | 1.3 | 1.7 | 0.4 |
| ----- | | | | | | | |

A group took Form C as pre test and Form D as post test

B group took Form D as pre test and Form C as post test

Test instrument SRA Level 2-4 Reading Comprehension and Vocabulary

* San Carlos Mission B group did significantly better on both reading comprehension and vocabulary tests at post testing than any other group. (1% level)

Mean Scores as Grade Equivalents

Comparison by Sites

Fourth Grade

| <u>Site</u> | <u>Group</u> | <u>Comprehension</u> | | | <u>Vocabulary</u> | | |
|--------------------|--------------|----------------------|-------------|-------------|-------------------|-------------|-------------|
| | | <u>Pre</u> | <u>Post</u> | <u>Gain</u> | <u>Pre</u> | <u>Post</u> | <u>Gain</u> |
| Sacaton | A | 2.3 | 2.8 | 0.5 | * | 2.6 | |
| | B | 2.4 | 2.8 | 0.4 | * | 2.6 | |
| ----- | | | | | | | |
| Peach Springs | A | 2.4 | 3.0 | 0.6 | 2.4 | 3.2 | 0.8 |
| | B | 2.3 | 2.6 | 0.3 | 2.3 | 2.8 | 0.5 |
| ----- | | | | | | | |
| Many Farms | A | 2.2 | 2.6 | 0.4 | 2.1 | 2.8 | 0.7 |
| | B | 2.2 | 2.3 | 0.1 | 2.2 | 2.2 | 0.0 |
| ----- | | | | | | | |
| Hotevilla | A | 2.5 | 2.9 | 0.4 | 2.6 | 2.6 | 0.0 |
| | B | 2.6 | 3.3 | 0.7 | 2.6 | 2.9 | 0.3 |
| ----- | | | | | | | |
| San Carlos Rice | A | 2.4 | 2.6 | 0.2 | 2.5 | 2.4 | -0.1 |
| | B | 2.7 | 2.7 | 0.0 | 2.7 | 2.7 | 0.0 |
| ----- | | | | | | | |
| Topowa | A | 2.5 | 3.1 | 0.6 | 2.3 | 2.8 | 0.5 |
| | B | 2.5 | 2.8 | 0.3 | 2.6 | 2.8 | 0.2 |
| ----- | | | | | | | |

A group took Form C as pre test and Form D as post test

B group took Form D as pre test and Form C as post test

* Fourth grade children at Sacaton were not pre-tested in vocabulary skills

Test instrument SRA Level 2-4 Reading Comprehension and Vocabulary

Mean Scores as Grade Equivalents

Comparison by Sites

Fifth Grade

| <u>Site</u> | <u>Group</u> | <u>Comprehension</u> | | | <u>Vocabulary</u> | | |
|--------------------|--------------|----------------------|-------------|-------------|-------------------|-------------|-------------|
| | | <u>Pre</u> | <u>Post</u> | <u>Gain</u> | <u>Pre</u> | <u>Post</u> | <u>Gain</u> |
| Sacaton | A | 3.2 | 3.1 | -0.1 | 3.1 | 3.1 | 0.0 |
| | B | 3.1 | 3.1 | 0.0 | 3.4 | 3.1 | -0.3 |
| ----- | | | | | | | |
| Peach Springs | A | 3.9 | 4.5 | 0.6 | 3.8 | 4.6 | 0.8 |
| | B | 3.1 | 4.2 | 1.1 | 3.3 | 4.1 | 0.8 |
| ----- | | | | | | | |
| Many Farms * | A | 4.5 | 5.3 | 0.8 | 4.6 | 5.7 | 1.1 |
| | B | 3.7 | 3.3 | -0.4 | 3.8 | 3.5 | -0.3 |
| ----- | | | | | | | |
| Hotevilla | A | 3.9 | 4.5 | 0.6 | 3.8 | 4.1 | 0.3 |
| | B | 4.0 | 4.7 | 0.7 | 4.1 | 4.7 | 0.6 |
| ----- | | | | | | | |
| San Carlos Rice | A | 3.9 | 4.4 | 0.5 | 3.9 | 4.5 | 0.6 |
| | B | 3.3 | 4.2 | 0.9 | 4.0 | 4.3 | 0.3 |
| ----- | | | | | | | |
| Topowa | A | 3.4 | 4.1 | 0.7 | 3.2 | 4.4 | 1.2 |
| | B | 3.1 | 4.3 | 1.2 | 3.3 | 4.2 | 0.9 |
| ----- | | | | | | | |

A group took Form C as pre test and Form D as post test

B group took Form D as pre test and Form C as post test

Test instrument SRA Multilevel/ Blue Reading Comprehension and
Vocabulary

* Many Farms group A performed significantly better than any other group in both comprehension and vocabulary skills at post test time. Many Farms group A was noticeably superior to other groups in both comprehension and vocabulary skills at pre test time.

Mean Scores as Grade Equivalents
Comparison by Sites

Sixth Grade

| <u>Site</u> | <u>Group</u> | <u>Comprehension</u> | | | <u>Vocabulary</u> | | |
|--------------------|--------------|----------------------|-------------|-------------|-------------------|-------------|-------------|
| | | <u>Pre</u> | <u>Post</u> | <u>Gain</u> | <u>Pre</u> | <u>Post</u> | <u>Gain</u> |
| Sacaton | A | 4.0 | 5.0 | 1.0 | 4.1 | 5.3 | 1.2 |
| | B | 4.1 | 4.7 | 0.6 | 4.4 | 4.8 | 0.4 |
| ----- | | | | | | | |
| Peach Springs | A | 3.1 | 4.9 | 1.8 | 3.1 | 4.8 | 1.7 |
| | B | 3.3 | 3.4 | 0.1 | 3.2 | 4.0 | 0.8 |
| ----- | | | | | | | |
| Hotevilla | A | 3.9 | 5.2 | 1.3 | 3.7 | 4.7 | 1.0 |
| | B | 4.3 | 5.1 | 0.8 | 3.7 | 4.3 | 0.6 |
| ----- | | | | | | | |
| San Carlos Rice | A | 3.4 | 3.7 | 0.3 | 3.4 | 3.8 | 0.4 |
| | B | 3.2 | 4.2 | 1.0 | 3.8 | 3.7 | -0.1 |
| ----- | | | | | | | |
| Topowa | A | 3.7 | 4.4 | 0.7 | 3.8 | 4.4 | 0.6 |
| | B | 3.8 | 4.6 | 0.8 | 3.8 | 5.0 | 1.2 |
| ----- | | | | | | | |
| Sells | A | 3.1 | 3.5 | 0.4 | 4.0 | 4.2 | 0.2 |
| | B | 3.7 | 4.1 | 0.4 | 4.1 | 4.3 | 0.2 |
| ----- | | | | | | | |

A group took Form C as pre test and Form D as post test

B group took Form D as pre test and Form C as post test

Test instrument SRA Multilevel/ Blue Reading Comprehension and
Vocabulary

Mean Scores as Grade Equivalents
Comparison by Sites
Seventh Grade

| <u>Site</u> | <u>Group</u> | <u>Comprehension</u> | | | <u>Vocabulary</u> | | |
|--------------------|--------------|----------------------|-------------|-------------|-------------------|-------------|-------------|
| | | <u>Pre</u> | <u>Post</u> | <u>Gain</u> | <u>Pre</u> | <u>Post</u> | <u>Gain</u> |
| Sacaton | A | 4.0 | 6.0 | 2.0 | 4.2 | 5.7 | 1.5 |
| | B | 3.6 | 5.2 | 1.6 | 4.5 | 5.7 | 1.2 |
| ----- | | | | | | | |
| Peach Springs | A | 3.2 | 6.0 | 2.8 | 4.0 | 5.3 | 1.3 |
| | B | 3.9 | 5.9 | 2.0 | 4.6 | 5.8 | 1.2 |
| ----- | | | | | | | |
| San Carlos Rice | A | 3.3 | 4.1 | 0.8 | 4.0 | 4.2 | 0.2 |
| | * B | 3.2 | 4.3 | 1.1 | 4.0 | 3.6 | -0.4 |
| ----- | | | | | | | |
| Sells | A | 3.2 | 4.1 | 0.9 | 3.5 | 4.5 | 1.0 |
| | B | 3.3 | 4.3 | 1.0 | 3.8 | 4.2 | 0.4 |
| ----- | | | | | | | |

A group took Form C as pre test and Form D as post test

B group took Form D as pre test and Form C as post test

Test instrument SRA Multilevel/ Blue Reading Comprehension and
Vocabulary

* San Carlos Rice B group did significantly poorer than other groups on vocabulary skills.

Mean Scores as Grade Equivalents

Comparison by Sites

Eighth Grade

| <u>Site</u> | <u>Group</u> | <u>Comprehension</u> | | | <u>Vocabulary</u> | | |
|--------------------|--------------|----------------------|-------------|-------------|-------------------|-------------|-------------|
| | | <u>Pre</u> | <u>Post</u> | <u>Gain</u> | <u>Pre</u> | <u>Post</u> | <u>Gain</u> |
| Sacaton | A | 4.0 | 6.0 | 2.0 | 4.3 | 5.6 | 1.3 |
| | B | 3.6 | 5.7 | 1.9 | 3.9 | 6.0 | 2.1 |
| ----- | | | | | | | |
| Peach Springs | A | 3.6 | 5.0 | 1.4 | 3.9 | 5.2 | 1.3 |
| | B | 3.7 | 4.9 | 1.2 | 4.1 | 5.5 | 1.4 |
| ----- | | | | | | | |
| San Carlos Rice | * A | 3.1 | 4.0 | 0.9 | 4.0 | 3.8 | -0.2 |
| | B | 3.1 | 4.0 | 0.9 | 3.3 | 4.4 | 1.1 |
| ----- | | | | | | | |
| Sells | A | 3.1 | 6.2 | 3.1 | 3.1 | 5.2 | 2.1 |
| | B | 3.2 | 4.9 | 1.7 | 3.3 | 5.2 | 1.9 |
| ----- | | | | | | | |

A group took Form C as pre test and Form D as post test

B group took Form D as pre test and Form C as post test

Test instrument SRA Multilevel/ Blue Reading Comprehension and Vocabulary

* San Carlos Rice A group did significantly poorer on vocabulary post test than other groups

Mean Scores as Grade Equivalents

Topowa

| <u>Grade</u> | <u>Group</u> | <u>Comprehension</u> | | | <u>Vocabulary</u> | | |
|--------------|--------------|----------------------|-------------|-------------|-------------------|-------------|-------------|
| | | <u>Pre</u> | <u>Post</u> | <u>Gain</u> | <u>Pre</u> | <u>Post</u> | <u>Gain</u> |
| 2 | A | 1.1 | 1.9 | 0.8 | 1.5 | 1.6 | 0.1 |
| | B | 1.3 | 1.5 | 0.2 | 1.1 | 1.8 | 0.7 |
| 3 | A | 1.7 | 2.4 | 0.7 | 1.8 | 2.4 | 0.6 |
| | B | 1.7 | 1.8 | 0.1 | 1.3 | 1.7 | 0.4 |
| 4 | A | 2.5 | 3.1 | 0.6 | 2.3 | 2.8 | 0.5 |
| | B | 2.5 | 2.8 | 0.3 | 2.6 | 2.8 | 0.2 |
| 5 | A | 3.4 | 4.1 | 0.7 | 3.2 | 4.4 | 1.2 |
| | B | 3.1 | 4.3 | 1.2 | 3.3 | 4.2 | 0.9 |
| 6 | A | 3.7 | 4.4 | 0.7 | 3.8 | 4.4 | 0.6 |
| | B | 3.8 | 4.6 | 0.8 | 3.8 | 5.0 | 1.2 |

A group took Form C as pre test and Form D as post test

B group took Form D as pre test and Form C as post test

Test instruments

Grades 2-4

SRA Level 2-4
Reading Comprehension
and Vocabulary

Grades 5 & 6

SRA Multilevel/ Blue
Reading Comprehension
and Vocabulary

Mean Scores as Grade Equivalents

San Carlos Rice

| <u>Grade</u> | <u>Group</u> | <u>Comprehension</u> | | | <u>Vocabulary</u> | | |
|--------------|--------------|----------------------|-------------|-------------|-------------------|-------------|-------------|
| | | <u>Pre</u> | <u>Post</u> | <u>Gain</u> | <u>Pre</u> | <u>Post</u> | <u>Gain</u> |
| 3 | A | 2.1 | 2.6 | 0.5 | 2.4 | 2.6 | 0.2 |
| | B | 2.0 | 2.3 | 0.3 | 2.1 | 2.4 | 0.3 |
| 4 | A | 2.4 | 2.6 | 0.2 | 2.5 | 2.4 | -0.1 |
| | B | 2.7 | 2.7 | 0.0 | 2.7 | 2.7 | 0.0 |
| 5 | A | 3.9 | 4.4 | 0.5 | 3.9 | 4.5 | 0.6 |
| | B | 3.3 | 4.2 | 0.9 | 4.0 | 4.3 | 0.3 |
| 6 | A | 3.4 | 3.7 | 0.3 | 3.4 | 3.8 | 0.4 |
| | B | 3.2 | 4.2 | 1.0 | 3.8 | 3.7 | -0.1 |
| 7 | A | 3.3 | 4.1 | 0.8 | 4.0 | 4.2 | 0.2 |
| | B | 3.2 | 4.3 | 1.1 | 4.0 | 3.6 | -0.4 |
| 8 | A | 3.1 | 4.0 | 0.9 | 4.0 | 3.8 | -0.2 |
| | B | 3.1 | 4.0 | 0.9 | 3.3 | 4.4 | 1.1 |

A group took Form C as pre test and Form D as post test

B group took Form D as pre test and Form C as post test

Test instruments

Grades 2-4

SRA Level 2-4
Reading Comprehension
and Vocabulary

Grades 5-8

SRA Multilevel/ Blue
Reading Comprehension
and Vocabulary

Mean Scores as Grade Equivalents

San Carlos Mission

| <u>Grade</u> | <u>Group</u> | <u>Comprehension</u> | | | <u>Vocabulary</u> | | |
|--------------|--------------|----------------------|-------------|-------------|-------------------|-------------|-------------|
| | | <u>Pre</u> | <u>Post</u> | <u>Gain</u> | <u>Pre</u> | <u>Post</u> | <u>Gain</u> |
| 2 | A | 2.3 | 2.8 | 0.5 | 2.3 | 2.9 | 0.6 |
| | B | 2.4 | 2.5 | 0.1 | 2.2 | 2.6 | 0.4 |
| ----- | | | | | | | |
| 3 | A | 2.6 | 3.3 | 0.7 | 2.3 | 2.9 | 0.6 |
| | B | 3.1 | 6+ | 2.9 | 2.9 | 5.0 | 2.1 |
| ----- | | | | | | | |

A group took Form C as pre test and Form D as post test

B group took Form D as pre test and Form C as post test

Test instrument

Grades 2&3

SRA Level 2-4
Reading Comprehension
and Vocabulary

Mean Scores as Grade Equivalents

Hotevilla

| <u>Grade</u> | <u>Group</u> | <u>Comprehension</u> | | | <u>Vocabulary</u> | | |
|--------------|--------------|----------------------|-------------|-------------|-------------------|-------------|-------------|
| | | <u>Pre</u> | <u>Post</u> | <u>Gain</u> | <u>Pre</u> | <u>Post</u> | <u>Gain</u> |
| 2 | A | 1.3 | 1.4 | 0.1 | 1.3 | 1.9 | 0.6 |
| | B | 1.1 | 1.5 | 0.4 | 1.9 | 1.9 | 0.0 |
| ----- | | | | | | | |
| 3 | A | 2.2 | 2.5 | 0.3 | 2.6 | 3.1 | 0.5 |
| | B | 1.9 | 2.1 | 0.2 | 2.2 | 2.3 | 0.1 |
| ----- | | | | | | | |
| 4 | A | 2.5 | 2.9 | 0.4 | 2.6 | 2.6 | 0.0 |
| | B | 2.6 | 3.3 | 0.7 | 2.6 | 2.9 | 0.3 |
| ----- | | | | | | | |
| 5 | A | 3.9 | 4.5 | 0.6 | 3.8 | 4.1 | 0.3 |
| | B | 4.0 | 4.7 | 0.7 | 4.1 | 4.7 | 0.6 |
| ----- | | | | | | | |
| 6 | A | 3.9 | 5.2 | 1.3 | 3.7 | 4.7 | 1.0 |
| | B | 4.3 | 5.1 | 0.8 | 3.7 | 4.3 | 0.6 |
| ----- | | | | | | | |

A group took Form C as pre test and Form D as post test

B group took Form D as pre test and Form C as post test

| | | |
|------------------|------------|---|
| Test instruments | Grades 2-4 | SRA Level 2-4 Reading Comprehension and Vocabulary |
| | Grades 5&6 | SRA Multilevel/ Blue Reading Comprehension and Vocabulary |

Mean Scores as Grade Equivalents

| <u>Grade</u> | <u>Group</u> | Many Farms Comprehension | | | Vocabulary | | |
|--------------|--------------|-----------------------------|-------------|-------------|------------|-------------|-------------|
| | | <u>Pre</u> | <u>Post</u> | <u>Gain</u> | <u>Pre</u> | <u>Post</u> | <u>Gain</u> |
| 2 | A | 1.6 | 2.2 | 0.6 | 1.8 | 2.4 | 0.6 |
| | B | 1.4 | 2.4 | 1.0 | 1.9 | 2.4 | 0.5 |
| ----- | | | | | | | |
| 3 | A | 1.9 | 2.2 | 0.3 | 2.2 | 2.4 | 0.2 |
| | B | 1.8 | 2.3 | 0.5 | 1.9 | 2.4 | 0.5 |
| ----- | | | | | | | |
| 4 | A | 2.2 | 2.6 | 0.4 | 2.1 | 2.8 | 0.7 |
| | B | 2.2 | 2.3 | 0.1 | 2.2 | 2.2 | 0.0 |
| ----- | | | | | | | |
| 5 | A | 4.5 | 5.3 | 0.8 | 4.6 | 5.7 | 1.1 |
| | B | 3.7 | 3.3 | -0.4 | 3.8 | 3.5 | -0.3 |
| ----- | | | | | | | |

A group took Form C as pre test and Form D as post test

B group took Form D as pre test and Form C as post test

Test instruments

Grades 2-4

SRA Level 2-4
Reading Comprehension
and Vocabulary

Grade 5

SRA Multilevel/ Blue
Reading Comprehension
and Vocabulary

Mean Scores as Grade Equivalents
Sacaton

| <u>Grade</u> | <u>Group</u> | <u>Comprehension</u> | | | <u>Vocabulary</u> | | |
|--------------|--------------|----------------------|-------------|-------------|-------------------|-------------|-------------|
| | | <u>Pre</u> | <u>Post</u> | <u>Gain</u> | <u>Pre</u> | <u>Post</u> | <u>Gain</u> |
| 2 | A | 1.7 | 2.3 | 0.6 | 1.6 | 2.5 | 0.9 |
| | B | 1.9 | 2.3 | 0.4 | 2.2 | 2.5 | 0.3 |
| 3 | A | 2.3 | 2.7 | 0.4 | 2.3 | 2.7 | 0.4 |
| | B | 2.2 | 2.3 | 0.1 | 2.4 | 2.1 | -0.3 |
| 4 | A | 2.3 | 2.8 | 0.5 | * | 2.6 | |
| | B | 2.4 | 2.8 | 0.4 | * | 2.6 | |
| 5 | A | 3.2 | 3.1 | -0.1 | 3.1 | 3.1 | 0.0 |
| | B | 3.1 | 3.1 | 0.0 | 3.4 | 3.1 | -0.3 |
| 6 | A | 4.0 | 5.0 | 1.0 | 4.1 | 5.3 | 1.2 |
| | B | 4.1 | 4.7 | 0.6 | 4.4 | 4.8 | 0.4 |
| 7 | A | 4.0 | 6.0 | 2.0 | 4.2 | 5.7 | 1.5 |
| | B | 3.6 | 5.2 | 1.6 | 4.5 | 5.7 | 1.2 |
| 8 | A | 4.0 | 6.0 | 2.0 | 4.3 | 5.6 | 1.3 |
| | B | 3.6 | 5.7 | 1.9 | 3.9 | 6.0 | 2.1 |

A group took Form C as pre test and Form D as post test

B group took Form D as pre test and Form C as post test

* 4th graders at Sacaton were not given vocabulary sub-test during pre-testing

Test instruments

Grades 2-4

SRA Level 2-4
Reading Comprehension
and Vocabulary

Grades 5-8

SRA Multilevel/ Blue
Reading Comprehension
and Vocabulary

Mean Scores as Grade Equivalents
Peach Springs

| <u>Grade</u> | <u>Group</u> | <u>Comprehension</u> | | | <u>Vocabulary</u> | | |
|--------------|--------------|----------------------|-------------|-------------|-------------------|-------------|-------------|
| | | <u>Pre</u> | <u>Post</u> | <u>Gain</u> | <u>Pre</u> | <u>Post</u> | <u>Gain</u> |
| 2 | A | 1.4 | 2.0 | 0.6 | 1.8 | 2.3 | 0.5 |
| | B | 1.6 | 2.3 | 0.7 | 1.2 | 2.3 | 1.1 |
| ----- | | | | | | | |
| 3 | A | 1.6 | 1.9 | 0.3 | 2.0 | 1.8 | -0.2 |
| | B | 1.7 | 1.7 | 0.0 | 2.0 | 1.8 | -0.2 |
| ----- | | | | | | | |
| 4 | A | 2.4 | 3.0 | 0.6 | 2.4 | 3.2 | 0.8 |
| | B | 2.3 | 2.6 | 0.3 | 2.3 | 2.8 | 0.5 |
| ----- | | | | | | | |
| 5 | A | 3.9 | 4.5 | 0.6 | 3.8 | 4.6 | 0.8 |
| | B | 3.1 | 4.2 | 1.1 | 3.3 | 4.1 | 0.8 |
| ----- | | | | | | | |
| 6 | A | 3.1 | 4.9 | 1.8 | 3.1 | 4.8 | 1.7 |
| | B | 3.3 | 3.4 | 0.1 | 3.2 | 4.0 | 0.8 |
| ----- | | | | | | | |
| 7 | A | 3.2 | 6.0 | 2.8 | 4.0 | 5.3 | 1.3 |
| | B | 3.9 | 5.9 | 2.0 | 4.6 | 5.8 | 1.2 |
| ----- | | | | | | | |
| 8 | A | 3.6 | 5.0 | 1.4 | 3.9 | 5.2 | 1.3 |
| | B | 3.7 | 4.9 | 1.2 | 4.1 | 5.5 | 1.4 |
| ----- | | | | | | | |

A group took Form C as pre test and Form D as post test

B group took Form D as pre test and Form C as post test

Test Instruments

Grades 2-4

SRA Level 2-4
Reading Comprehension
and Vocabulary

Grades 5-8

SRA Multilevel/ Blue
Reading Comprehension
and Vocabulary

Mean Scores as Grade Equivalents

Sells

| <u>Grade</u> | <u>Group</u> | <u>Comprehension</u> | | | <u>Vocabulary</u> | | |
|--------------|--------------|----------------------|-------------|-------------|-------------------|-------------|-------------|
| | | <u>Pre</u> | <u>Post</u> | <u>Gain</u> | <u>Pre</u> | <u>Post</u> | <u>Gain</u> |
| 6 | A | 3.1 | 3.5 | 0.4 | 4.0 | 4.2 | 0.2 |
| | B | 3.7 | 4.1 | 0.4 | 4.1 | 4.3 | 0.2 |
| ----- | | | | | | | |
| 7 | A | 3.2 | 4.1 | 0.9 | 3.5 | 4.5 | 1.0 |
| | B | 3.3 | 4.3 | 1.0 | 3.8 | 4.2 | 0.4 |
| ----- | | | | | | | |
| 8 | A | 3.1 | 6.2 | 3.1 | 3.1 | 5.2 | 2.1 |
| | B | 3.2 | 4.9 | 1.7 | 3.3 | 5.2 | 1.9 |
| ----- | | | | | | | |

A group took Form C as pre test and Form D as post test

B group took Form D as pre test and Form C as post test

Test instrument

Grades 6-8

SRA Multilevel/ Blue
Reading Comprehension
and Vocabulary

1.1.7.1 For regular classrooms, it may be concluded that:

- (1) The performance objective was not met, though in all fairness, it was unrealistic.
- (2) Considerable improvement in reading skills was evidenced, particularly in the upper grades. (It is possible that the form of the test - SRA Multilevel - with a total administration time of 70 minutes, was a factor contributing to this greater achievement).
- (3) At the second grade level, the children at St. Charles Mission, San Carlos, were significantly better readers than children at the other sites, based upon entry behavior determined at pre-testing.
- (4) The third grade teacher at Peach Springs had little success in reading, and it is doubtful whether the educational materials were used effectively in this classroom.
- (5) The St. Charles Mission third grade teacher realized the largest gains of any teacher in the lower primary grades.
- (6) Children in the fifth grade at Sacaton did not make progress in reading skills. The assigned teacher was absent due to illness for an extended period during the school year.
- (7) The 5th grade classroom at Many Farms appeared to be subdivided into a "good readers" and "poor readers" grouping. Results indicate excellent growth for the former, and regression for the latter.
- (8) The 6th grade teacher at Peach Springs achieved an improvement of nearly 2 grade levels for $\frac{1}{2}$ of her class.
- (9) Seventh grade teachers at Peach Springs and Sacaton realized more than a grade equivalent increase in both comprehension and vocabulary, based on the entire class average.
- (10) Eighth grade students at all target sites excepting San Carlos Rice demonstrated remarkable improvement, in one case three grade level equivalents (Sells).

1.1.7.2 Process evaluation for reading achievement involved the administration of short tests to measure proficiency in comprehension and vocabulary. Results from these tests were to be correlated with observation data to determine effects of teacher behavior on reading achievement.

Numerous complaints were received from teachers, and in some cases, principals, about these tests. The objections centered around the inappropriateness for both interest level and grade level, as well as poor test design.

The SWCEL Evaluator and the acting Project Director agreed mutually to discontinue the process evaluation. SWCEL engaged a Reading Specialist Consultant to review these tests, and it was determined that some of the passages were 12th grade level, for example, rather than 7th/8th grade level, based upon the Dale-Chill formula.

1.1.7.2 (cont.)

The consultant's full report is included in the Addendum.

- 1.1.7.3 Children in regular classrooms in grades K-2 were administered the Distar Mastery Test on a post basis only. Exceptions to these included TOPOWA, where the children had not been instructed in Distar, and at St. Charles Mission, where there were not enough Distar Mastery I test booklets available to test the Kindergarten children.

The Distar Mastery Test is criterion referenced, assessing whether specific objectives of the Distar program have been met satisfactorily. It cannot be used as an achievement test, nor can raw score results be converted to grade equivalents.

Results of the Distar Mastery Tests indicate that the objectives of the program are being met. Statistical treatment of these tests are included in the addendum.

A chi-square treatment was employed to relate teacher behavior, as observed by a trained observer, to results on these Mastery Tests. Basically, there was little variance from one teacher's behavior to another, as reflected in the observation schedules.

While Distar Mastery Tests cannot be considered as a valid instrument for assessing the performance objective, it is important to note that the achievement reported by 2nd graders, (from SRA Testing), was better in the case of Distar classrooms than in non-Distar classrooms. This point needs further investigation.

- 1.1.7.4 Children at TOPOWA, 1st grade, were given the Wide Range Achievement Test in lieu of the Distar Mastery Test. This substitution met with the approval of the TOPOWA Principal and classroom teacher.

Results are reported in the Addendum.

2. General Objective

To increase the affective behavior patterns of staff members in the 48 target classrooms.

2.1 Performance Objective

Eighty per-cent of the 48 staff members at the six selected sites will, by June 1972, as a result of simulated minority-majority cultural role-playing situations, and introduction and utilization of the interaction analysis technique, improve their affective behavioral patterns, as evidenced by an affective gain in the results of the pre-post interaction analysis individuals patterns and by utilization of an affective behavior rating scale to be developed.

- 2.1.1 A Program Coordinator was employed to provide instructional leadership and program monitoring at the target sites. This individual also assumed duties as Acting Project Director during the last half of the school year.

- 2.1.2 Frequent efforts from the SWCEL Evaluator to determine if an inservice workshop was held at the target sites for the express purpose of explaining this objective lead to the conclusion that it was not accomplished. Conversations with teachers indicated they had little or no knowledge of the objective, yet there were some conversations which revealed that the role-playing situations had been discussed.
- 2.1.3 There was no evidence that a consultant was engaged to visit classrooms for purposes of observing behavioral teaching patterns. The Acting Project Director had no knowledge that this had been accomplished, and it is felt that it was not.
- 2.1.4 Some seminars were held to improve teacher understanding in areas of cultural awareness. The frequency of such seminars decreased as the year progressed. Reaction from teachers ranged from "These were excellent", to "These sessions have done more to alienate teachers than anything else - they presume we are stupid".
- It appears that Project management did not communicate the overall purposes of this objective effectively, and that this failing, in turn, generated its share of resentment.
- 2.1.5 Examination of two school libraries indicated that the video tapes of simulated cultural situations were not available. Libraries visited were Sells & Topowa. It is strongly suggested that the Advisory Committee review any such tapes prior to purchasing, or the effects may be more negative than positive.
- 2.1.6 It is not within the purview of the SWCEL Evaluator to decide how video tapes of simulated cultural situations should be disseminated by USOE, but it is again strongly recommended that the Advisory Committee review the tapes thoroughly prior to any dissemination.
- 2.1.7 There is no evidence that either of these sections was accomplished.
- & Communications with the Acting Project Director indicates that 2.1.2, (2.1.8) 2.1.3, 2.1.7, and 2.1.8 were not done.

2.1.1 - 8.1

The development of a rating scale to measure affective behavior is a major undertaking. For example, the University of Illinois' Group Effectiveness Research Laboratory, Department of Psychology, as a contractor to the Office of Naval Research, devoted many years to the task of developing and validating such instruments as the semantic differential, the behavior differential, and other social distance scales used to assess cultural behavior relationships.

SWCEL should not have attempted to develop a new instrument in the short time available, but rather should have researched the field for instruments already validated and used in similar educational research projects.

The SWCEL instrument lacked quantification, it failed to isolate stimulus conditions, and it was not validated prior to use.

In retrospect, the entire objective was weak, though its intent was clear.

2.1.1 - 8.1 (cont.)

It is up to Project Management to determine what to do in the teacher affective behavior area. Considerable revision is necessary to bring the intent of this objective into a rigorous design.

Since the instrument selected to measure the performance criterion lacked validation data, it cannot be determined whether the performance objective was met or not met.

3. General Objective

To increase motivation by means of an open curriculum.

(Evaluator's comment: The evaluation design for this objective states, "to reduce student drop-out ratio".)

3.1 Performance Objective

As a result of exposure to the motivational program, 80% of the target population will by June 1972 have increased their self-image (attitude) as evidenced by gain scores of administered pre-post attitude inventories.

- 3.1.1 A self-appraisal inventory, developed by the UCLA Center for the Study of Evaluation Instructional Objectives Exchange, Intermediate level, was administered to regular classroom students in grades 3-8 at each target site.

Student responses were not obtained anonymously, and it is highly questionable, according to the publisher, whether the instrument should be used if an individual puts his name on the response form. Anonymity would heighten the validity of the evaluation.

The intermediate level self-appraisal inventory was intended for grade ranges 4-6, and should not have been administered to 3rd grades. A primary level of the self-appraisal instrument does exist for grade levels K-3.

There is a secondary level of the inventory to be used in grade levels 7-12.

- 3.1.2 Motivational Kits were purchased and delivered to the target sites. These Kits contained well-developed materials in the form of booklets and tapes designed to assist the adult listener in matters of realizing success through achievement of goals and objectives. The materials were commercially prepared, and intended for general usage by any career worker, and were not specific to the problems of the educator or classroom teacher.

With a minimum of interpretation, the materials could have considerable benefits to teachers and other adults in the Project. The Project management staff is capable of making such interpretations so that these materials might be of more practical use.

The materials are not appropriate for students. The materials are tailored to the adult mind, and rely on experience and judgmental development which the elementary school child has not realized.

3.1.2 (cont.)

The enterprising teacher could, through hours of work, reproduce the materials so that they would have value for the children. It is the writer's understanding that the publisher has developed a Kit, suitable for children, and it is suggested that Project Management appoint a committee of teachers to review and recommend whether such a Kit should be purchased.

In retrospect, the expenditure of monies to purchase the original Kits, if these were to be utilized by the students, appears most wasteful. The expenditure can be justified only if the motivational effort was directed towards adults. The question arises as to whether the Kits were reviewed thoroughly in the first place.

- 3.1.3 The school libraries visited were well equipped with literature revealing tribal cultures. It is assumed that school librarians could easily determine usage by referring to the borrower's card.

- 3.1.4 Displays of locally produced materials revealing cultural matters were observed in visiting selected classrooms. There did not appear to be any plan where such materials could be shared with other sites.

It is suggested that teachers need more assistance in the development of native language instructional materials, and that Community Representatives and other parents could be of assistance in this task.

- 3.1.5 Field trip planning on the major scale, (i.e. Washington D.C.), failed to materialize. The logistics involved in such an undertaking are awesome, and perhaps the locally planned, short duration trip has the equivalent educational enrichment value for elementary school children.

The principal at Hotevilla deserves singular praise for his well-planned and skillfully executed field trip to Mesa Verde National Park.

Field trips to the botanical gardens and Zoo in Phoenix also appeared productive.

The trip that some Sells students took to Tucson to visit a first-class restaurant and enjoy a costly steak dinner does not appear to fit the criterion of educational enrichment. The children probably would have enjoyed hamburgers better.

- 3.1.6 The Project newsletter does not report that cross-cultural educational programs were presented by students. The idea is great, and should be pursued. This type of presentation would have high interest level.
- 3.1.7 It is assumed that these programs were intended for the students. The SWCEL evaluator has no direct evidence that Project Management arranged for such programs.
- 3.1.8 To keep the design consistent between pre and post administrations, the intermediate level self-appraisal inventory was administered to all regular classroom students at all sites, grades 3-8. The post-

3.1.8 (cont.)

administration, similar to the pre-administration, was not given anonymously, except on an experimental basis with the 4th grade teacher at Popowa. The SWCEL Evaluator and the teacher agreed that more validity would result from anonymous responses.

3.1.1 - 8.1

Data are reported in the Addendum. Mean scores measuring the peer, family, school, and general self-image concepts are shown on a pre-post basis, by school, and by classroom. (Sites not identified)

Through discussions between the new Project Director, the Superintendent, the Project Coordinator, the Project Community Representative, and the SWCEL Evaluator, it was agreed that SWCEL would respect the confidentiality of the individuals' self-concept responses, that sites would not be publicly identified, and that the dissemination of the data would be subject to the discretion of the Project Director.

It is recognized that counselors, and perhaps teachers, might have legitimate requirements for the individual data, but such requirements will have to be communicated to the Project Director.

From a program standpoint, it may be stated that improvement was noted in self-images between pre and post administrations.

In view of the validation data of the instrument, (group validity rather than individual validity), it cannot be stated whether the performance criterion, as stated, was met.

It must also be stated that no component of the evaluation design appears to relate to the open curriculum, (refer to general objective), and that no component of the evaluation design appears to assess directly the student drop-out ratio.

4. General Objective

To increase effective special education programs.

(Evaluator's comment - The Evaluation design indicates that this objective is, "To increase the achievement of handicapped students in basic skills.")

4.1 Performance Objective

As a result of exposure, application and utilization of the Montessori Program (K-6), 70% of the handicapped students in the target sites will be achieving basic skills at grade level by June 1973, as evidenced by results of standardized achievement tests.

- 4.1.1 Wide Range Achievement test was administered to a few special education children at post-testing time. Extended use of this instrument for all special education children is incorporated in the evaluation design for the second project year. (In one case, a young girl at Sells who scored 1 minus in grade equivalent total reading based on SRA testing, scored 3.4 grade level with the WRAT!)

4.1.1 (cont.)

The reference to Arizona State Law is unclear. If special education children require, by State law, testing above and beyond that of other children, the writer is unaware of this requirement. From a psychological standpoint, it is hoped that this is not the case, for it would place a "legal label" on the child which could have deleterious effects.

4.1.2 Montessori materials were purchased and distributed to special education classrooms. Teachers involved did not have special training in the use of Montessori materials. In the case at Sells, these materials remained in a school closet for some time. Several teachers were cycled in and out of the special education classroom at this site, and finally a teacher arrived who was entirely dedicated to the needs and interests of special education children (i.e. Miss Forbes).

4.1.3 There was no carpeting in the special education classroom at Sells. The SWCEL Evaluator does not recall seeing carpeting in the special education classroom at Sacaton.

4.1.4 Not accomplished. This is a priority item for the next pre-service workshop.

4.1.5 Visits were held at the three sites, and informal discussions between representatives of Project Management and the special education teachers indicate that attention was given to this area.

The major problem appears to be one of sensitizing regular classroom teachers to the unique teaching difficulties with special education children, and to avoid the tendency of using special education classes as a disciplinary vehicle for poor-performing students. In the teacher's lounge at Sells, for example, the following comment was heard from a regular classroom teacher, "Many of my kids are stupid - they belong in Special Ed."

4.1.6 The monthly newsletter is an excellent vehicle to report Project activities. A few articles, with pictures, showing Special Education activities, might well serve to enhance motivation and recognition for these handicapped youngsters.

4.1.7 The appropriate level SRA achievement test was administered on a pre-post basis to Special Education children at the three sites. Reading skills and arithmetic skills were assessed.

Data are reported in the Addendum. Results are highly encouraging, especially in arithmetical achievement.

It should be noted that one teacher at San Carlos Rice, (i.e. Miss Batson), refused to let the test administrators, (both of whom were experienced Albuquerque Public School Educators), give the reading tests at post-test time. Her statement, "These kids are non-readers", may well be true. A void in the evaluation design is only a minor consequence of this action. Giving the test might have exposed the children to an unsuccessful experience, to be sure. Not giving the test could only have the effect of telling the child, "My teacher doesn't believe I have learned reading skills - I must be dumb."

4.1.7 (cont.)

If we continually label Special Education children as inferior, the self-fulfilling prophecy will surely work.

Some Special Education classes used Distar reading programs. These classes were given the Distar Mastery Test. This accounts for lack of complete SRA testing at post-test time.

4.1.1 - 7.1

Clearly, the results show that Special Education children, including EMR children, do learn, though at a decelerated rate.

Recognition of their handicaps, empathy from the teacher and others in contact with the child will help immensely in improving the skills.

The performance criterion correctly takes the decelerated learning rate into consideration in calling for a June 1973 assessment.

From a broader standpoint, looking at the general objective of increasing the effectiveness of Special Education programs in the light of the needs assessment study done by the BIA on rural Indian children in Arizona, Project Management has a long way to go in establishing a viable, systematic, comprehensive total program. There would indeed be more than 44 children in the Special Education Category, if this were the case.

5. General Objective

To increase the involvement of the parents in the target sites.

5.1 Performance objective

Seventy percent of the parents at the six selected sites will by June 1, 1972, as a result of (a) refurbishing a building and supervising a study-social room for the students to be used from 3:00 PM to 9:00 PM, Monday through Friday, (b) assistance in making tapes and filmstrips on Tribal Culture for the Project, and (c) their attendance at six out of eight town hall type meetings, increase their involvement, as evidenced by the results of project questionnaire and record keeping data.

5.1.1 Discussions were held with the assigned Community Representative to Project Management for purposes of ascertaining this individual's opinions in the area of this general objective. The activities of the Advisory committee included the recommendations to Project Management on curriculum matters. Mr. Machu Kay, Chairman of the Advisory Committee, sponsored a resolution from the Advisory Committee which called for a review of all testing materials by that committee prior to administration to Indian children.

5.1.2 According to the Community Representative, the parents at some sites were very active in arranging the study-social room. On the other hand, this was not true at all sites.

- 5.1.3 Adult recreational activities and vocational classes were held in the evenings in at least one site (Hotevilla). Community Action Program (CAP) used the facility at Peach Springs.
- 5.1.4 The SWCEL Evaluator has no data on parental attendance at town hall meetings. It is the understanding that Project Management was compiling data from the sites for a report.

The Community Representative felt that her services were not fully utilized. She felt she could assist in getting more representation from the Indian Community on the Advisory Committee, for example.

The SWCEL Evaluator attended two meetings of the Advisory Committee. This group has a definite contribution to make which can assist in all objective areas.

Since the group is Advisory in nature to Project Management, and since the group is representative of the Indian Tribal groups, it seems inappropriate that members of Project Management, (i.e. school administrators), should be simultaneously voting members of the Advisory Committee.

ADDENDUM

1. SELF-APPRAISAL Inventory (SAI)

Instrument used was intermediate level SAI, developed by Instructional Objectives Exchange, UCLA Center for the Study of Evaluation.

This instrument assesses self-concept in four categories: peer relationships (P), family relationships (F), school relationships (S) and general self-image (G).

Data are reported by mean raw scores by classroom and by site, on a pre-post basis. Sites are not identified in the interests of safeguarding the confidentiality of the data. Project Management has been given all data necessary to interpret these results.

| Site | Classroom | <u>Mean Raw Scores</u> | | | | <u>SAI</u> | | | |
|------|----------------|------------------------|----------|----------|----------|------------|----------|----------|----------|
| | | Pre-Test | | | | Post-Test | | | |
| | | <u>P</u> | <u>F</u> | <u>S</u> | <u>G</u> | <u>P</u> | <u>F</u> | <u>S</u> | <u>G</u> |
| A | A ₁ | 9.5 | 10.1 | 11.1 | 10.1 | 8.2 | 11.9 | 10.4 | 10.4 |
| | A ₂ | 10.0 | 13.5 | 11.3 | 11.7 | 9.0 | 10.9 | 8.8 | 10.0 |
| | A ₃ | 9.6 | 11.5 | 10.8 | 10.4 | 9.3 | 10.8 | 8.3 | 11.1 |
| | A ₄ | 10.2 | 12.0 | 11.2 | 12.5 | 11.2 | 12.4 | 8.6 | 11.4 |
| | A ₅ | 9.2 | 11.5 | 7.3 | 10.6 | 11.0 | 13.6 | 7.7 | 11.7 |
| | A ₆ | 11.2 | 11.6 | 7.7 | 10.7 | 11.9 | 11.6 | 8.4 | 11.5 |
| B | B ₁ | 9.2 | 11.8 | 7.0 | 9.6 | 11.9 | 13.3 | 10.4 | 13.2 |
| | B ₂ | 9.0 | 9.1 | 6.2 | 8.1 | 9.1 | 9.7 | 6.2 | 9.4 |
| | B ₃ | 10.0 | 11.9 | 9.5 | 11.0 | 11.5 | 12.5 | 7.2 | 13.7 |
| C | C ₁ | 8.6 | 10.2 | 9.6 | 8.9 | 10.8 | 11.7 | 12.5 | 12.0 |
| | C ₂ | 7.9 | 12.2 | 11.9 | 9.3 | 10.0 | 11.7 | 11.2 | 11.1 |
| | C ₃ | 11.5 | 12.7 | 11.2 | 12.2 | 12.1 | 14.3 | 10.0 | 11.5 |
| | C ₄ | 9.0 | 12.9 | 10.6 | 9.8 | 10.8 | 13.3 | 9.8 | 11.3 |
| | C ₅ | 11.7 | 12.3 | 11.2 | 11.0 | 11.2 | 11.1 | 7.2 | 10.0 |
| | C ₆ | 10.7 | 12.8 | 11.2 | 10.7 | 10.0 | 12.1 | 11.8 | 10.8 |
| D | D ₁ | 12.1 | 11.9 | 15.3 | 12.6 | 12.5 | 12.8 | 13.2 | 12.5 |
| | D ₂ | 11.3 | 12.7 | 13.5 | 10.9 | 9.7 | 14.0 | 12.0 | 10.8 |
| | D ₃ | 11.5 | 13.5 | 12.8 | 11.4 | 10.5 | 12.9 | 11.5 | 11.8 |
| E | E ₁ | 9.6 | 10.1 | 11.6 | 10.8 | 9.2 | 9.5 | 10.0 | 8.9 |
| | E ₂ | 8.8 | 10.3 | 8.5 | 9.0 | 8.0 | 10.2 | 6.6 | 9.4 |
| | E ₃ | 9.4 | 12.6 | 11.4 | 11.3 | 10.7 | 15.5 | 11.4 | 10.7 |

Mean Raw Scores SAI (cont.)

| <u>Site</u> | <u>Classroom</u> | <u>Pre-Test</u> | | | | <u>Post-Test</u> | | | |
|-------------|------------------|-----------------|----------|----------|----------|------------------|----------|----------|----------|
| | | <u>P</u> | <u>F</u> | <u>S</u> | <u>G</u> | <u>P</u> | <u>F</u> | <u>S</u> | <u>G</u> |
| F | F ₁ | 9.6 | 12.5 | 12.9 | 11.5 | 9.4 | 11.4 | 10.8 | 10.9 |
| | F ₂ | 10.0 | 10.3 | 11.0 | 9.4 | 10.3 | 13.8 | 11.6 | 11.0 |
| | F ₃ | 11.0 | 14.0 | 11.4 | 11.2 | 10.7 | 13.4 | 9.9 | 11.4 |
| | F ₄ | 10.5 | 11.6 | 10.5 | 11.2 | 10.2 | 13.8 | 10.2 | 11.1 |
| G | G ₁ | 9.4 | 11.8 | 12.5 | 11.0 | 10.1 | 12.7 | 13.7 | 11.0 |
| | G ₂ | 10.8 | 10.7 | 11.2 | 11.6 | 10.8 | 12.5 | 11.9 | 10.9 |
| | G ₃ | 8.9 | 12.3 | 9.8 | 10.7 | 12.0 | 12.0 | 8.7 | 10.4 |
| | G ₄ | 8.2 | 10.9 | 7.2 | 9.8 | 10.0 | 11.3 | 8.3 | 10.5 |

Mean Data by Sites

| <u>Site</u> | <u>Pre-Test</u> | | | | <u>Post-Test</u> | | | |
|-------------|-----------------|----------|----------|----------|------------------|----------|----------|----------|
| | <u>P</u> | <u>F</u> | <u>S</u> | <u>G</u> | <u>P</u> | <u>F</u> | <u>S</u> | <u>G</u> |
| A | 9.9 | 9.8 | 9.9 | 11.0 | 10.1 | 11.9 | (8.7) | 11.0 |
| B | 9.4 | 10.9 | 7.6 | 9.6 | 10.8 | 11.8 | 7.9 | 12.1 |
| C | 9.9 | 12.0 | 10.9 | 10.6 | 10.8 | 12.4 | (10.4) | 11.1 |
| D | 11.6 | 12.7 | 13.9 | 11.6 | (10.9) | 13.2 | (12.2) | 11.7 |
| E | 9.3 | 11.0 | 10.5 | 10.4 | 9.3 | 11.7 | (8.6) | (9.3) |
| F | 10.3 | 12.1 | 11.5 | 10.8 | (10.2) | 13.1 | (10.6) | 11.1 |
| G | 9.4 | 11.4 | 10.2 | 10.8 | 10.7 | 12.2 | 10.7 | (10.7) |

Of the 28 possible categories, gains were evidenced in 20, and decrements in 8. The child's concept of his school relationships, (S), indicated a decline in five sites. Perhaps this is a natural tendency towards the end of a school year.

From the standpoint of the total Project, children demonstrated improvement in self-concept in peer relationships, family relationships, and general self-image. The only category which showed a decline was school relationships.

By categories, children had the strongest positive self-concepts at both pre-test and post-test in family relationships, followed closely by general self-image.

The categories of school relationships and peer relations were 3rd and 4th respectively at pre-test time, and these positions were reversed at post-test time.

In summary, while gains did occur in the self-concept area, as measured by the SAI, Project Management should recognize the seriousness of a decline in the child's concept in relation to school. The priority on motivation is justified.

2. WIDE RANGE ACHIEVEMENT TESTING - TOPOWA

First grade children at Topowa were administered the WRAT in lieu of the Distar Mastery Test since these children had not received Distar training.

The decision to use the WRAT, (reading section), was made with the concurrence of the Topowa Principal and Reading Specialist.

Results are given in the following table:

| <u>Name</u> | <u>Raw Score</u> | <u>Grade Equivalent</u> |
|----------------------|------------------|-------------------------|
| <i>Student Names</i> | 25 | 1.2 |
| <i>Deleted</i> | 16 | Kdg. 6 |
| | 18 | Kdg. 7 |
| | 14 | Kdg. 4 |
| | 22 | 1.0 |
| | 21 | Kdg. 9 |
| | 20 | Kdg. 8 |
| | 28 | 1.4 |
| | 21 | Kdg. 9 |
| | 23 | 1.1 |
| | 32 | 1.6 |
| | 16 | Kdg. 6 |
| | 27 | 1.3 |
| | 25 | 1.2 |
| | 10 | Kdg. 2 |
| | 24 | 1.2 |
| | 28 | 1.4 |
| | 31 | 1.5 |
| | 26 | 1.3 |
| | 26 | 1.3 |
| | 27 | 1.3 |
| | 25 | 1.2 |
| | 23 | 1.1 |
| | 27 | 1.3 |
| | 25 | 1.2 |
| | 22 | 1.0 |
| | 26 | 1.3 |
| | 27 | 1.3 |

Mean Raw Score
23.4

Mean Grade Equivalent
1.1

From the validation data of the WRAT, (reading section), the mean raw scores for children of ages 6½ years to 7 years on this instrument are 32.25 and 39.85 respectively. Corresponding standard deviations are 10.72 and 12.30. From the raw score data, and after checking birth dates of the children, it is evident that this group is well below the national average in reading skills.

3. SPECIAL EDUCATION DATA

SRA Level 2-4 was the instrument used to assess reading and arithmetic skills at pre-testing. The instrument worked successfully in two classrooms, (San Carlos Rice/Rentaria, and Sells), but proved to be too difficult for the other Special Ed classrooms, (San Carlos Rice/Batson and Sacaton). In the latter cases, many students failed to achieve at the minimum grade equivalent level for which the test was designed.

For this reason, the lower primary level SRA was used at post-testing. The upper grade equivalent peak out point on this instrument is Grade 4 plus, rather than Grade 6 plus, as is the case in the SRA Level 2-4. It was found to be a more valid instrument for use with these children.

Data are reported by grade equivalents on a pre-post basis. Reporting raw scores would have no value since the test levels differ.

Grade Equivalent Scores - Sacaton

Reading Comprehension & Vocabulary

| <u>Name</u> | <u>Pre-Test</u> | | <u>Post-Test</u> | |
|----------------------------------|-----------------|------------|------------------|------------|
| | <u>Comp</u> | <u>Voc</u> | <u>Comp</u> | <u>Voc</u> |
| <i>Student names deleted</i> | 1-- | 1.1 | 1.8 | 1.3 |
| | 1-- | 1-- | (not tested) | |
| | 1.4 | 1-- | 1.5 | 2.6 |
| | 1-- | 1-- | 1-- | 1.7 |
| | 1-- | 1-- | 1.1 | 1.5 |
| | 1-- | 1-- | (not tested) | |
| | 2.1 | 1.6 | (" ") | |
| | 1-- | 1-- | (" ") | |
| | 1-- | 1-- | 1.1 | 1-- |
| | 1-- | 1-- | 1-- | 1.9 |
| | 1-- | 1-- | (not tested) | |
| | 1.2 | 1-- | (" ") | |
| | 1.6 | 2.1 | 1.5 | 2.6 |
| | (not tested) | | 1.1 | 2.2 |

The inappropriateness of the SRA Level 2-4 instrument is evident from examining pre-test results.

Several students were not post-tested, but did take the Distar Mastery Test.

The improvements noted are encouraging.

Grade Equivalent Scores - Sells
Reading Comprehension & Vocabulary

| <u>Name</u> | <u>Pre-Test</u> | | <u>Post-Test</u> | |
|------------------------------|-----------------|------------|------------------|------------|
| | <u>Comp</u> | <u>Voc</u> | <u>Comp</u> | <u>Voc</u> |
| <i>Student Names Deleted</i> | 2.1 | 2.3 | 2.8 | 2.5 |
| | 1-- | 1-- | 2.3 | 2.1 |
| | 2.3 | 2.4 | (left school) | |
| | 1-- | 1-- | 1.7 | 1.3 |
| | 4.1 | 3.1 | 4plus | 2.9 |
| | 1-- | 1-- | 2.1 | 1.3 |
| | 1-- | 1.8 | (not tested) | |
| | 2.1 | 2.1 | 2.4 | 2.5 |
| | 1.4 | 2.1 | (not tested) | |
| | 1-- | 1-- | 1-- | 1-- |

The Evaluator inquired why Rufus Lewis was in the Special Ed Class, since he was obviously far superior in reading skills than the other students. The teacher advised that Rufus was assigned to Special Ed, for reasons of discipline. It is recommended that Project Management investigate this situation, and hopefully Rufus will be reassigned to a regular classroom.

Martha Rios, upon request by the Special Ed teacher, was given the WRAT. She scored a 3.4 grade level equivalent!!

The above data support the statement that children with mental handicaps can learn, but at a decelerated rate.

Grade Equivalent Scores - San Carlos Rice (Batson)
Reading Comprehension and Vocabulary

| <u>Name</u> | <u>Pre-Test</u> | | <u>Post-Test</u> | |
|------------------------------|-----------------|------------|------------------|------------|
| | <u>Comp</u> | <u>Voc</u> | <u>Comp</u> | <u>Voc</u> |
| <i>Student Names Deleted</i> | 1-- | 1-- | (not tested) | |
| | 1-- | 1-- | (not tested) | |
| | 1-- | 1-- | (not tested) | |
| | 1-- | 1-- | (not tested) | |
| | 1-- | 1-- | (not tested) | |
| | 1.7 | 1-- | 1.7 | 1-- |
| | 1-- | 1-- | (not tested) | |
| | 1-- | 1-- | (not tested) | |
| | 1-- | 1-- | (not tested) | |
| | 2.2 | 1-- | 1.1 | 1.1 |
| | 1.7 | 1-- | 2.2 | 1-- |
| | 1-- | 1-- | (not tested) | |
| | 2.7 | 2.4 | 2.7 | 2.3 |
| | 1-- | 1-- | 1.4 | 2.1 |

The inappropriateness of the SRA Level 2-4 instrument for this class is again demonstrated by the pre-test data.

The teacher requested that many students not be tested. (See comments in Section 4 of Report).

These students took the Distar Mastery Test.

Grade Equivalent Scores - San Carlos Rice (Rentaria)

Reading Comprehension and Vocabulary

| <u>Name</u> | <u>Pre-Test</u> | | <u>Post-Test</u> | |
|------------------------------|-----------------|------------|------------------|------------|
| | <u>Comp</u> | <u>Voc</u> | <u>Comp</u> | <u>Voc</u> |
| <i>Student Names Deleted</i> | 1-- | 1-- | (not tested) | |
| | 2.2 | 1-- | 2.4 | 1.7 |
| | 2.3 | 2.1 | 2.8 | 2.3 |
| | 1.5 | 2.2 | (not tested) | |
| | 1.6 | 1.6 | 1.8 | 1.9 |
| | 1.8 | 2.3 | (not tested) | |
| | 1-- | 1-- | 1-- | 2.3 |
| | 1.6 | 1.8 | 2.3 | 2.1 |
| | 1.6 | 2.1 | 1-- | 2.2 |
| | 2.6 | 2.4 | (not tested) | |
| | 2.3 | 1.4 | (not tested) | |
| | (not tested) | | 1.1 | 2.3 |
| | (not tested) | | 1.6 | 1.1 |
| | | | | |

The decelerated learning rate is again reflected by the data.

These students also took the Distar Mastery Test.

Grade Equivalent Scores - Sacaton

Arithmetic Concepts, Reasoning and Computations

| <u>Name</u> | <u>Pre-Test</u> | | | <u>Post-Test</u> | | |
|------------------------------|-----------------|------------|-------------|------------------|------------|-------------|
| | <u>Con</u> | <u>Rea</u> | <u>Comp</u> | <u>Con</u> | <u>Rea</u> | <u>Comp</u> |
| <i>Student Names Deleted</i> | 1-- | 2.6 | 2.1 | 1.9 | 2.3 | 3.4 |
| | 1-- | 1-- | 2.2 | (not tested) | | |
| | 1-- | 1.1 | 1.1 | (not tested) | | |
| | 1-- | 1-- | 1-- | 1-- | 1.6 | 2.7 |
| | 1-- | 2.1 | 1.1 | (not tested) | | |
| | 1-- | 1-- | 1-- | (not tested) | | |
| | 1-- | 1-- | 1.3 | (not tested) | | |
| | 1-- | 1-- | 1-- | (not tested) | | |
| | 1-- | 1.5 | 1-- | 1-- | 1.6 | 2.7 |
| | 1-- | 1-- | 1-- | (not tested) | | |
| | 1.5 | 1.8 | 1-- | (not tested) | | |
| | 1.5 | 1.5 | 1-- | (not tested) | | |
| | 1-- | 1-- | 1.3 | 1.2 | 1.9 | 2.8 |
| | (not tested) | | | 1.1 | 1.5 | 2.8 |

The post-testing team was under the assumption that since these students were in a Distar Math Program, they would not be post tested with the SRA. The regular teacher did some testing as indicated above.

Based on pre-test scores, the SRA Level 2-4 proved inappropriate.

Grade Equivalent Scores - Sells

Arithmetic Concepts, Reasoning, and Computations

| <u>Name</u> | <u>Pre-Test</u> | | | <u>Post-Test</u> | | |
|------------------------------|-----------------|-------------|-------------|------------------|-------------|-------------|
| | <u>Con</u> | <u>Reas</u> | <u>Comp</u> | <u>Con</u> | <u>Reas</u> | <u>Comp</u> |
| <i>Student Names Deleted</i> | 2.2 | 1-- | 2.4 | 1.4 | 1-- | 1.7 |
| | 2.5 | 1-- | 1.4 | 1.1 | 1.3 | 3.1 |
| | 1.8 | 1.5 | 2.5 | (left school) | | |
| | 2.3 | 1-- | 1.4 | 1.7 | 1-- | 2.5 |
| | 2.5 | 2.1 | 3.4 | 2.8 | 2.7 | 4plus |
| | 1.3 | 1.8 | 2.7 | 1.7 | 1-- | 3.8 |
| | 1.3 | 1.8 | 1-- | (not tested) | | |
| | 2.4 | 2.1 | 1.1 | 2.3 | 1.2 | 2.7 |
| | 3.2 | 1.5 | 2.1 | (not tested) | | |
| | 1.1 | 1.5 | 1-- | 1.8 | 1-- | 1-- |

The data reflect that Special Education children can handle computations reasonably well, while concepts and mathematical thought processes are more difficult.

There appears to be more success in teaching Special Education children arithmetic than reading.

Grade Equivalent Scores - San Carlos Rice (Batson)

Arithmetic Concepts, Reasoning and Computation

| <u>Name</u> | <u>Pre-Test</u> | | | <u>Post-Test</u> | | |
|------------------------------|-----------------|------------|-------------|------------------|------------|-------------|
| | <u>Con</u> | <u>Rea</u> | <u>Comp</u> | <u>Con</u> | <u>Rea</u> | <u>Comp</u> |
| <i>Student Names Deleted</i> | 1-- | 1-- | 1.1 | (not tested) | | |
| | 1-- | 1-- | 1-- | 1-- | 1-- | 1-- |
| | 1.8 | 1-- | 1.5 | 1.2 | 1-- | 2.4 |
| | 1-- | 1-- | 1.3 | 1-- | 1-- | 2.9 |
| | 1-- | 1-- | 1.3 | 1-- | 1.5 | 2.7 |
| | 2.1 | 1-- | 2.6 | (not tested) | | |
| | 1.3 | 1-- | 2.9 | (not tested) | | |
| | 1.1 | 1-- | 1- | 1.4 | 1.5 | 2.4 |
| | 1.3 | 1-- | 2.2 | 1-- | 1-- | 2.6 |
| | 1.8 | 1-- | 2.6 | 1-- | 2.2 | 1.6 |
| | (not tested) | | | 1.5 | 1.9 | 1.7 |
| | 1-- | 1-- | 1-- | 1-- | 1-- | 1-- |
| | 1.8 | 1-- | 3.5 | 2.3 | 1.6 | 3.1 |
| | 1.6 | 1-- | 1.8 | 1-- | 1.2 | 3.3 |

Pre-test results indicate inappropriate test instrument.

Improvement in computation skills is encouraging, demonstrating that EMR children can learn.

Grade Equivalent Scores - San Carlos Rice (Rentaria)

Arithmetic Concepts, Reasoning, and Computations

| <u>Name</u> | Pre-Test | | | Post-Test | | |
|----------------------------------|------------|------------|-------------|------------|--------------|-------------|
| | <u>Con</u> | <u>Rea</u> | <u>Comp</u> | <u>Con</u> | <u>Rea</u> | <u>Comp</u> |
| <i>Student Names Deleted</i> | 1.7 | 2.1 | 1-- | | (not tested) | |
| | 1.5 | 1-- | 1.5 | 1.2 | 1-- | 1.9 |
| | 1.8 | 2.6 | 3.3 | 2.1 | 1.4 | 3.8 |
| | 2.7 | 1.5 | 2.9 | 1.5 | 1.7 | 2.4 |
| | 2.5 | 2.1 | 2.8 | | (not tested) | |
| | 2.4 | 1.5 | 3.2 | 1.8 | 2.2 | 2.5 |
| | 1.7 | 2.1 | 1.4 | 1-- | 1-- | 1-- |
| | 2.5 | 2.3 | 3.2 | 2.3 | 2.3 | 3.3 |
| | 2.3 | 1.5 | 2.7 | 1-- | 1.7 | 1.8 |
| | 2.7 | 2.3 | 2.1 | | (not tested) | |
| | 2.8 | 2.3 | 3.7 | 2.1 | 2.9 | 2.5 |
| | 1-- | 1-- | 2.7 | 1.5 | 1-- | 1.9 |
| | | | | | | |
| | | | | | | |
| | | | | | | |

These children, in many cases, performed better on the pre-test than on the post-test. This could be due to many factors, perhaps faulty test administration.

4. REPORT OF CONSULTANT SERVICE

Southwestern Cooperative Educational Laboratory, Inc.

Date of Report 4-19-72

Name Mrs. Helen R. Yoakum

Dates of
Service 4-14/15-1972

Position Reading Specialist

Nature of Service rendered (written report, group participation, etc.) observe reading program and interviewing personnel at Peach Springs

Friday - attend HEED Co-ordinating Meeting -- Observation and Interviews

Sat. - attend general meeting of HEED work Affective Behavior

Flagstaff - Observation and Interview - acted in advisory capacity -

Resume of recommendations (please attempt to be as concise as possible) Written Report to Lab.

1. Distar and Field Reading good - Some lack of training in use of materials especially need more cultural-ethnic direction materials/Field Enterprises
2. Improve testing program - material needs to relate to culture - Teachers need to be "in" on testing program - ethnic background and to reading level of children.
3. Improve communications with people on sites - especially Indian tribal representatives.
4. Reading program should develop oral language ESL program to support reading development.
5. Improve Teacher Training Workshops - open classroom-activity as base for reading is needed.

Resume of use of consultant service and general remarks. Please complete a one or

two page narrative relative to topics covered. I was asked by Dr. Hughes to

evaluate the reading program of HEED Project as it pertained to the objectives set out in the HEED Project report. I went to the Project

site at Peach Springs meeting with Dr. Hughes to see the reading program in action, to meet

and talk with the teachers involved in the program, and to meet the

Advisory Committee of HEED Project. Then I attended the Affective

Behavior teach-in at Flagstaff to meet the teachers and administrators

from all six of the concerned HEED sites. The following observations

are based upon comments made to me directly and overheard in the general

meetings, and upon my direct observations of the program and meetings

in action. My conclusions are generalized, summarized, and organized

according to objectives stated in the program.

Report of Consultant Service - cont. The teachers were generally concerned with the reading program. They were disturbed by the testing program, both material and method of administration. They showed little concern with affective behavior for themselves, only as their children demonstrated it. They felt many of the workshops so far had been worthless, but wanted oral language and English as a second language workshop developed.

Reading: Teachers were primarily concerned with reading, oral language development and cultural-ethnic reading materials. All teachers expressed satisfaction with the Distar program. Most had had a workshop on how to use it and felt it had been worthwhile. (Most were using rotating station organization in a semi-open classroom organization.) One had had no workshop and was using Distar in the conventional classroom organization, and several had had only a little pre-use instruction. While teachers liked the Field Enterprises series, they felt they could benefit from in-service training in the use of materials and methods of teaching.

All teachers requested something be done to help them to develop an oral language program with emphasis on English as a second language to support the reading program. Teachers all expressed vital concern over the lack of cultural-ethnically oriented reading and oral language development materials. (During the lunch break, I took several of the participants to the Northern Arizona Museum where they found a dozen or more titles suitable for elementary grades, to help develop their cultural-ethnic libraries, some of which were written in dual languages, English and Navajo, or English and Hopi. (Mr. Garcia, Many Farms Principal, commented upon the effectiveness of the illustrations for use in developing concepts in the non-verbal affective domain.) In

(Signed) _____

addition, Mrs. Ipharr ordered booklists to be distributed among the six concerned sites. I have promised to send more titles (and bibliographies) as I locate them.)

Teacher Training: Comments on teacher training ranged from good (Distar) to waste of time. The small number of teachers attending the Dr. Galloway's program on Affective Teacher Behavior was a stark commentary on the involved teacher's attitude about their training experiences. Those teachers in attendance seemed favorably impressed with Dr. Galloway's ideas, and expressed a desire for ~~more~~ additional workshops in the area of affective behavior.

A. Affective Behavior:

No teacher expressed an opinion on being evaluated in the affective behavioral domain, because, it seemed to me, they seemed to have very little concept of this objective as expressed in the HEED program.

Testing: All teachers and principals talked most about the testing materials as being unsuitable for the students being tested and that the people doing the testing were not suited to the job they were asked to do. Direct quotes from teachers, principals, and Indian leaders of the program were:

Tests didn't go well.

Tests didn't measure what was being taught.

Tests should be adapted to children who are going to take them.

Teachers and directors of program should evaluate the tests before they are given to be sure that they are suited to the ethnic-cultural background of the students being tested and in both subject matter, reading difficulty, and construction of tests.

Tests should not be given by kids.

Short skirts interfered with attention of students. Short skirts were not suitable dress *for the Testers,*

Students who gave tests did not care about results of first test, only that the second test showed up better than the first.

Tests were not culturally or ethnically related to the students.

Teacher's ought to be trained to give tests and just be supervised by the lab people.

Testers didn't want teachers in the room during testing.

Generally, the teachers felt the tests were poorly administered, that strangers produced a distracting element and insecure testing condition for their students, that the students will perform better for the familiar teacher. They were even more concerned because the tests were not culturally related to the area, therefore students naturally would not, could not show up well in the results. One principal stated the problem and feeling succinctly, "I didn't look at the results of the tests. I wasn't interested. I knew what they were going to be." The teachers also felt left out of the testing process. My opinion is that teachers who feel left out or pushed out have little or no desire to know the results of the tests and will respond little to feed-back data.

Recommendations:

I. Redesign testing program. Tests must relate to the ethnol/ogical background of the students. The Indian leaders are particularly unhappy with present conditions. In developing process evaluation tests, employ competent people to develop reading content with relevant subject matter, suitable reading levels, and consistent format of testing material items. Simplify and clarify testing directions for both administration and for students taking the test. Involve teachers in testing procedures.

II. Develop the ethnic-cultural reading materials for the children in areas of both reading and oral language development to support and extend correct reading programs based on bi-lingual, English as a second language, linguistic structures.

(Premise: Reading and writing abilities are based upon the ability of the student to handle the language structures orally. Concepts are based in oral language before they are read about or written.)

III. Teacher workshop or in-service training in the following areas:

- a. Concepts and classroom management of open classroom
- b. Nonverbal communication (teacher affective behavior domain) (also teacher-student relationship development, especially in the area of motivation.)
- c. Reading--developing culturally-ethnically related reading materials, and developing more innovative methods for teaching the particular children involved in the program.
- d. Oral language bi-lingual materials and methods of teaching.

IV. Relationships with white administrators of HEED and SWCEL seems

to be good but there seems to be a serious breakdown in rapport with the Indian leaders as to the purpose of the testing program and of the Lab's ability to produce a reliable and valid testing program ^{Improved Testing Program} and More effective communication between Indian leaders and teachers in HEMD with Lab may help establish rapport in this area.

V. If it is decided to proceed with evaluations of affective teacher behavior, before proceeding with them it would be well to insure that teachers understand what affective behavior is, how the evaluation affects them, and that the evaluation tools are appropriate and that the evaluators are thoroughly experienced, knowledgeable, and sympathetic (or, based on comments about current testing programs, I predict revolt).

Robert L. Gossman 4-19-72

PROJECT HEED WORKSHOP

AUGUST 8 - 18

AUGUST 8th

| | |
|--------------------------------|--|
| 8:30 - 9:30 Chemistry 208 | Dr. Virgil Gillenwater, Executive Vice President of NAU. "Welcome to Northern Arizona University" |
| 9:30 - 10:00 | Coffee Break |
| 10:00 - 11:30 Chemistry 208 | Introduction of Project HEED staff. Orientation session regarding HEED objectives, sites, personnel, and pre/post test design. |
| 1:00 - 3:30 Chemistry 208 | Continuation of above, i.e., study-social rooms, fieldtrip guidelines, educational materials, consultants, evaluator, and project auditor for 1972-73 |

AUGUST 9th through AUGUST 11th - THE INDIAN WAY

| | |
|------------------------------|---|
| 8:30 - 9:30 Chemistry 208 | Pimas - Introduction by Mamie Sizemore Presentation by Nelson Jose |
| 9:30 - 10:00 | Coffee Break |
| 10:00 - 11:30 | Anna More Shaw Agnes Allison Gila River Day School Dancers |
| 1:00 - 3:30 | Papagos - Mr. Tony Chico |
| 8:00 - 10:00 P.M. | Get Acquainted Mixer - Holiday Inn Ballroom |

AUGUST 10th

| | |
|------------------------------|--|
| 8:30 - 9:30 Chemistry 208 | Apaches Mrs. Delores Cassadore |
| 9:30 - 10:00 | Coffee Break |
| 10:00 - 11:30 | Apaches (continued) - Phillip Cassadore |
| 1:00 - 2:30 | I.D. Processing, Room 111, Student Affairs Building |
| 2:30 - 3:30 Chemistry 208 | Hopis - Dr. Griffen "Biculturalness and its Major Implications" |

AUGUST 11th

8:30 - 9:30
Chemistry 208

Navajos - Dr. Goosen "The Navajo and His Language"

9:30 - 10:00

Coffee Break

10:00 - 11:30

Navajos (continued)

1:00 - 3:30
Chemistry 208

Haulapais - Mrs. Watahomigie

AUGUST 12th

8:30 - 9:30
Chemistry 208

Presentation by Mrs. Margot Shoaf, Sacaton
School Business Office.

9:30 - 10:00

Coffee Break

10:00 - 11:30
Chemistry 208
Chemistry 203

Section A - Teachers and aides attend Indian Youth Panel
Section B - Principals meet with Project Staff

1:00 - 3:30

Guided tour of Museum of Northern Arizona, Flagstaff

AUGUST 13th

All day, educational field trip to Grand Canyon

AUGUST 14th
Chemistry 208

All day with appropriate coffee and lunch breaks
Dr. Orval Hughes, Southwestern Cooperative Laboratory,
Presentation of pre/post test results of program for 1971-72
Oral Language Program
Quality Assurance Specialist
Reinforced Readiness Requisites Program

AUGUST 15th

8:30 - 9:30
Chemistry 208

Dr. Rambeau - "Reading and the Indian Child"

9:30 - 10:00

Coffee Break

10:00 - 11:30
Chemistry 208

Section A - Motivational Kits, Teachers K-8
Charles Bisbee & Mrs. Hennard

Chemistry 203

Section B - Special Education teachers and aides,
"Individualized Programs" - Dr. Miller
and Mrs. McFarland

1:00 - 3:30

Continuation of Sections A and B

AUGUST 16th

8:30 - 9:30
Chemistry 208

Dr. Rosenblum - "Reinforcement Theory"

9:30 - 10:00

Coffee Break

10:00 - 11:30
Chemistry 203
Science 203

Polo C. de Baca, Grades K-4
Nancy Harris, Grades 5-8

1:00 - 2:30
Chemistry 203
Science 203
Science 213

Small Groups Practicum
Dr. Rosenblum
Mr. C. de Baca
Mrs. Harris

2:30 - 3:30

Mrs. Sizemore - "Language and Culture Courses"

AUGUST 17th

Chemistry 203
Science 203
Science 213

All day with appropriate coffee and lunch breaks

Distar K-3 - Bonnie Bruington
Field 4-8 - Nancy Harris
Montessori - Special Education - Virginia Opincar

AUGUST 18th

8:30 - 1:30

With appropriate coffee and lunch breaks

Chemistry 203
Science 203
Science 213

Distar K-3 - Marylou Carpenter
Field 4-8 - Nancy Harris
Montessori - Special Education - Virginia Opincar

2:00 - 3:00
Chemistry 208

Written examination - teachers and aides

FILE DISTAR (CREATION DATE = 07/18/72) STUDENT PERFORMANCE ON DISTAR READING MASTERY TEST

TEACH ***** CROSS TABULATION OF *****
TEACHER'S NAME ***** BY PARTA CISTAR PART A *****
***** PAGE 1 OF 1

| | | PARTA | | | |
|---------------|-------|-------|----------|---------|-------|
| TEACH | COUNT | ROW | NON- | SUCCESS | TOTAL |
| | FCW | PCT | ISUCCESS | | |
| | 1 | 1 | 1 | 1 | 2 |
| CALDWELL | 1 | 15 | 7 | 1 | 22 |
| | 1 | 88.2 | 31.8 | 1 | 13.5 |
| WATAMCNIGA | 2 | 17 | 2 | 1 | 19 |
| | 1 | 85.5 | 10.5 | 1 | 12.0 |
| HAPGREAVES | 3 | 10 | 3 | 1 | 13 |
| | 1 | 76.9 | 23.1 | 1 | 8.2 |
| KORSEC | 4 | 22 | 0 | 1 | 22 |
| | 1 | 100.0 | 0.0 | 1 | 13.9 |
| VINCENT | 5 | 12 | 3 | 1 | 15 |
| | 1 | 80.0 | 20.0 | 1 | 9.5 |
| SISTER REGINA | 6 | 22 | 0 | 1 | 22 |
| | 1 | 100.0 | 0.0 | 1 | 13.5 |
| EVERS | 7 | 23 | 0 | 1 | 23 |
| | 1 | 100.0 | 0.0 | 1 | 14.6 |
| WEEDEN | 8 | 20 | 2 | 1 | 22 |
| | 1 | 90.9 | 5.1 | 1 | 13.5 |
| COLUMN | 141 | 17 | 158 | | |
| TOTAL | 89.2 | 10.8 | 100.0 | | |

CHI SQUARE = 21.69174 WITH 7 DEGREES OF FREEDOM
CONTINGENCY COEFFICIENT = 0.34744

CISTAR (CREATION: DATE = 07/18/72) STUDENT PERFORMANCE ON CISTAR READING MASTERY TEST

***** CROSS TABULATION OF *****
 TEACH TEACHER'S NAME BY PARTS CISTAR PART B *****
 ***** PAGE 1 OF 1

| CAPTR | | COUNT | | NON- | | ROW | |
|---------------|---------|----------|---------|----------|---------|-------|-------|
| TEACH | ROW PCT | ISUCCESS | SUCCESS | ISUCCESS | SUCCESS | TOTAL | TOTAL |
| COLDWELL | | | | | | | |
| 1. | 14 | 1 | 1 | 1 | 2 | 1 | 22 |
| 2. | 63.6 | 1 | 36.4 | 1 | 13.9 | 1 | 13.9 |
| WATAHCNIGA | | | | | | | |
| 1. | 15 | 1 | 4 | 1 | 19 | 1 | 12.0 |
| 2. | 78.9 | 1 | 21.1 | 1 | 13 | 1 | 8.2 |
| HARGREAVES | | | | | | | |
| 1. | 8 | 1 | 5 | 1 | 13 | 1 | 22 |
| 2. | 61.5 | 1 | 38.5 | 1 | 13.9 | 1 | 15 |
| KORSEC | | | | | | | |
| 1. | 19 | 1 | 3 | 1 | 22 | 1 | 9.5 |
| 2. | 86.4 | 1 | 13.6 | 1 | 15 | 1 | 22 |
| VINCENT | | | | | | | |
| 1. | 6 | 1 | 9 | 1 | 15 | 1 | 22 |
| 2. | 40.0 | 1 | 60.0 | 1 | 13.9 | 1 | 23 |
| SISTER REGINA | | | | | | | |
| 1. | 21 | 1 | 1 | 1 | 22 | 1 | 14.6 |
| 2. | 95.5 | 1 | 4.5 | 1 | 23 | 1 | 13.9 |
| EVERS | | | | | | | |
| 1. | 20 | 1 | 3 | 1 | 23 | 1 | 22 |
| 2. | 87.0 | 1 | 13.0 | 1 | 13.9 | 1 | 158 |
| WEEDEN | | | | | | | |
| 1. | 17 | 1 | 5 | 1 | 22 | 1 | 24.1 |
| 2. | 77.3 | 1 | 22.7 | 1 | 13.9 | 1 | 100.0 |
| TOTAL | | | | | | | |
| COLUMN | 120 | 38 | 158 | 1 | 158 | 1 | 100.0 |
| TOTAL | 75.9 | 24.1 | 100.0 | 1 | 100.0 | 1 | 100.0 |

CHI SQUARE = 21.40514 WITH 7 DEGREES OF FREEDOM
 CONTINGENCY COEFFICIENT = 0.3457C

DISTAR (CREATION DATE = 07/18/72) STUDENT PERFORMANCE ON DISTAR READING MASTERY TEST

***** C R O S S T A B U L A T I O N O F *****
TEACH TEACHER'S NAME BY PARTC CISTAR PART C
***** PAGE 1 OF 1

| TEACH | COUNT | | PARTC | | NON-SUCCESS | NON-SUCCESS | TOTAL |
|-------------------|-------|------|-------|------|-------------|-------------|-------|
| | ROW | PCT | 1 | 2 | | | |
| 1. CALDWELL | 1 | 12 | 1 | 10 | 1 | 1 | 22 |
| 2. WATAHCHNIGA | 1 | 54.5 | 1 | 45.5 | 1 | 1 | 13.5 |
| 3. HARGREAVES | 1 | 17 | 1 | 2 | 1 | 1 | 15 |
| 4. KORSEC | 1 | 89.5 | 1 | 10.5 | 1 | 1 | 12.0 |
| 5. VIRCENT | 1 | 7 | 1 | 6 | 1 | 1 | 13 |
| 6. SISTER REGINA | 1 | 57.8 | 1 | 46.2 | 1 | 1 | 8.2 |
| 7. EVERS | 1 | 17 | 1 | 5 | 1 | 1 | 22 |
| 8. WEEDEN | 1 | 77.3 | 1 | 22.7 | 1 | 1 | 13.9 |
| 9. VINCENT | 1 | 8 | 1 | 7 | 1 | 1 | 15 |
| 10. SISTER REGINA | 1 | 53.3 | 1 | 46.7 | 1 | 1 | 9.5 |
| 11. EVERS | 1 | 19 | 1 | 3 | 1 | 1 | 22 |
| 12. WEEDEN | 1 | 86.4 | 1 | 13.6 | 1 | 1 | 13.9 |
| 13. EVERS | 1 | 22 | 1 | 1 | 1 | 1 | 23 |
| 14. WEEDEN | 1 | 95.7 | 1 | 4.3 | 1 | 1 | 14.6 |
| 15. WEEDEN | 1 | 12 | 1 | 10 | 1 | 1 | 22 |
| 16. WEEDEN | 1 | 54.5 | 1 | 45.5 | 1 | 1 | 13.5 |
| COLUMN | 114 | 44 | 158 | | | | |
| TOTAL | 72.2 | 27.8 | 100.0 | | | | |

CHI SQUARE = 23.2574C WITH 7 DEGREES OF FREEDOM
CONTINGENCY COEFFICIENT = 0.35821